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Environment Testing
America



ANALYTICAL REPORT

Eurofins Lancaster Laboratories Env, LLC
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Laboratory Job ID: 410-66395-1

Client Project/Site: Groundwater PFAS-TO2

For:

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Authorized for release by:

12/21/2021 8:03:02 AM

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

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Marrissa Williams
Project Manager
12/21/2021 8:03:02 AM

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Definitions/Glossary

Client: Eastern Research Group, Inc.

Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Qualifiers

LCMS

| Qualifier | Qualifier Description |
|-----------|--|
| *- | LCS and/or LCSD is outside acceptance limits, low biased. |
| *1 | LCS/LCSD RPD exceeds control limits. |
| *5- | Isotope dilution analyte is outside acceptance limits, low biased. |
| *5+ | Isotope dilution analyte is outside acceptance limits, high biased. |
| B | Compound was found in the blank and sample. |
| cn | Refer to Case Narrative for further detail |
| H | Sample was prepped or analyzed beyond the specified holding time |
| H3 | Sample was received and analyzed past holding time. |
| I | Value is EMPC (estimated maximum possible concentration). |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

Glossary

Abbreviation

These commonly used abbreviations may or may not be present in this report.

| | |
|----------------|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| 1C | Result is from the primary column on a dual-column method. |
| 2C | Result is from the confirmation column on a dual-column method. |
| CFL | Contains Free Liquid |
| CFU | Colony Forming Unit |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MCL | EPA recommended "Maximum Contaminant Level" |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| MPN | Most Probable Number |
| MQL | Method Quantitation Limit |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| NEG | Negative / Absent |
| POS | Positive / Present |
| PQL | Practical Quantitation Limit |
| PRES | Presumptive |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |
| TNTC | Too Numerous To Count |

Case Narrative

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Job ID: 410-66395-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Narrative

Job Narrative 410-66395-1

Receipt

The samples were received on 12/10/2021 10:01 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.2°C

PFAS

Method PFC_IDA: The recovery for the labeled isotope(s) in the laboratory control spike sample associated with the following sample: SP-27 (410-66395-4) is outside the QC acceptance limits. The window should be considered advisory therefore the data is reported. Target analyte(s) were detected in the method blank associated with the following sample: SP-27 (410-66395-4). Since the result in the sample is ND, the data is reported. The recovery for the labeled isotope(s) in the following sample: SP-27 (410-66395-4) is outside the QC acceptance limits. Since the recovery is high and the native analyte is not detected in the sample, the data is reported.

Method PFC_IDA: The following sample(s) was received with less than 2 days remaining on the holding time or less than one shift (8 hours) remaining on a test with a holding time of 48 hours or less. As such, the laboratory had insufficient time remaining to perform the analysis within holding time: Trip Blank (410-66395-3). Target analytes were discovered in the following field blank sample: Trip Blank (410-66395-3). The following action was taken: This sample was re-extracted outside of the required holding time and target analytes were again discovered. The recovery for the labeled isotope(s) in the laboratory control spike sample associated with the following sample: Trip Blank (410-66395-3) is outside the QC acceptance limits. The window should be considered advisory therefore the data is reported. The recovery for the labeled isotope(s) in the following sample: Trip Blank (410-66395-3) is outside the QC acceptance limits. The following action was taken: This sample was re-extracted outside the required holding time and the recovery for the labeled isotope(s) is again outside the QC acceptance limits.

Method PFC_IDA: The recovery for labeled isotope d9-N-EtFOSE-M is outside the QC acceptance limits in the closing continuing calibration verification associated with the following samples: SP-27 (410-66395-4). The analyte is not detected and the data is reported.

Method PFC_IDA: The recovery for the labeled isotope(s) in the following sample: SP-21 (410-66395-1) is outside the QC acceptance limits. The following action was taken: This sample was re-extracted within the required holding time and the recovery for the labeled isotope(s) is again outside the QC acceptance limits. The recovery for the labeled isotope(s) in the laboratory control spike sample associated with the following sample: SP-21 (410-66395-1) is outside the QC acceptance limits. The window should be considered advisory therefore the data is reported. Target analyte(s) were detected in the method blank associated with the following sample: SP-21 (410-66395-1). Since the result in the sample is ND, the data is reported.

Method PFC_IDA: The recovery for the labeled isotope(s) in the laboratory control spike sample associated with the following sample: SP-24 (410-66395-2) is outside the QC acceptance limits. The window should be considered advisory therefore the data is reported. Target analyte(s) were detected in the method blank associated with the following sample: SP-24 (410-66395-2). The following action was taken: This sample(s) was re-extracted within the required holding time and target analyte(s) were not detected in the re-extracted method blank. The recovery for the labeled isotope(s) in the following sample: SP-24 (410-66395-2) is outside the QC acceptance limits. The following action was taken: This sample was re-extracted within the required holding time and the recovery for the labeled isotope(s) is again outside the QC acceptance limits. The sample injection standard peak areas in the following sample: SP-24 (410-66395-2) is outside the QC acceptance limits. The following action was taken: This sample was re-extracted within the required holding time and the sample injection standard peak areas was outside QC acceptance limits

Method PFC_IDA: The recovery for the labeled isotope(s) in the laboratory control spike sample associated with the following sample: SP-28 (410-66395-5) is outside the QC acceptance limits. The window should be considered advisory therefore the data is reported. The recovery for the labeled isotope(s) in the method blank associated with samples: SP-28 (410-66395-5) is outside the QC acceptance limits. Since the recovery is high and the associated native analyte is not detected in the method blank, the data is reported.

Method PFC_IDA: The recovery for the labeled isotope(s) in the laboratory control spike sample associated with the following sample: SP-29 (410-66395-6) is outside the QC acceptance limits. The window should be considered advisory therefore the data is reported. The recovery for the labeled isotope(s) in the following sample: SP-29 (410-66395-6) is outside the QC acceptance limits. The following action was taken: This sample was re-extracted within the required holding time and the recovery for the labeled isotope(s) is again outside the QC acceptance limits. The recovery for the labeled isotope(s) in the method blank associated with samples: SP-29 (410-66395-6) is

Case Narrative

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Job ID: 410-66395-1 (Continued)

Laboratory: Eurofins Lancaster Laboratories Env, LLC (Continued)

outside the QC acceptance limits. Since the recovery is high and the associated native analyte is not detected in the method blank, the data is reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Client Sample ID: SP-21

Lab Sample ID: 410-66395-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|--|--------|-----------|------|-------|------|---------|---|---------|-----------|
| Perfluoro-3-methoxypropanoic acid (PMMPA) | 7.75 | cn | 1.74 | 0.174 | ng/L | 1 | | 537 IDA | Total/NA |
| Hexafluoropropylene Oxide Dimer Acid (HFPO-DA) | 5.47 | cn | 2.61 | 0.435 | ng/L | 1 | | 537 IDA | Total/NA |
| Perfluoro-2-(perfluoroethoxy)propionic acid | 1.99 | cn | 1.74 | 0.174 | ng/L | 1 | | 537 IDA | Total/NA |
| Perfluoropentanoic acid | 23.5 | cn | 1.74 | 0.435 | ng/L | 1 | | 537 IDA | Total/NA |
| Perfluorohexanoic acid | 5.11 | cn | 1.74 | 0.435 | ng/L | 1 | | 537 IDA | Total/NA |
| Perfluoroctanoic acid | 0.740 | J cn | 1.74 | 0.435 | ng/L | 1 | | 537 IDA | Total/NA |
| Perfluorobutanesulfonic acid | 4.34 | cn | 1.74 | 0.435 | ng/L | 1 | | 537 IDA | Total/NA |
| Perfluoroheptanoic acid | 1.24 | J I cn | 1.74 | 0.435 | ng/L | 1 | | 537 IDA | Total/NA |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | 11.9 | cn | 1.74 | 0.174 | ng/L | 1 | | 537 IDA | Total/NA |
| Perfluoropropanesulfonic acid | 0.853 | J cn | 1.74 | 0.174 | ng/L | 1 | | 537 IDA | Total/NA |
| Perfluoro-2-methoxyacetic acid (PFMOAA) | 1.19 | J cn | 1.74 | 0.174 | ng/L | 1 | | 537 IDA | Total/NA |
| Perfluoro-4-isopropoxybutanoic acid (PFIpOBA) | 0.362 | J cn | 1.74 | 0.174 | ng/L | 1 | | 537 IDA | Total/NA |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | 9.00 | cn | 1.74 | 0.174 | ng/L | 1 | | 537 IDA | Total/NA |
| Perfluorobutanoic acid - DL | 446 | cn | 43.5 | 17.4 | ng/L | 10 | | 537 IDA | Total/NA |
| Perfluoropropionic Acid (PFPRA) - DL | 412 | cn | 43.5 | 17.4 | ng/L | 10 | | 537 IDA | Total/NA |

Client Sample ID: SP-24

Lab Sample ID: 410-66395-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|--|--------|-----------|------|-------|------|---------|---|---------|-----------|
| Perfluoro-3-methoxypropanoic acid (PMMPA) | 117 | cn | 1.78 | 0.178 | ng/L | 1 | | 537 IDA | Total/NA |
| Hexafluoropropylene Oxide Dimer Acid (HFPO-DA) | 160 | cn | 2.67 | 0.445 | ng/L | 1 | | 537 IDA | Total/NA |
| Perfluoro-4-ethylcyclohexanesulfonic acid | 28.4 | cn | 1.78 | 0.178 | ng/L | 1 | | 537 IDA | Total/NA |
| Perfluoro-2-(perfluoroethoxy)propionic acid | 49.3 | cn | 1.78 | 0.178 | ng/L | 1 | | 537 IDA | Total/NA |
| Perfluoropentanesulfonic acid | 20.9 | cn | 1.78 | 0.445 | ng/L | 1 | | 537 IDA | Total/NA |
| N-ethylperfluoroctanesulfonamidoacetic acid (NEtFOSAA) | 2.96 | I B cn | 2.67 | 0.445 | ng/L | 1 | | 537 IDA | Total/NA |
| Perfluorohexanoic acid | 242 | cn | 1.78 | 0.445 | ng/L | 1 | | 537 IDA | Total/NA |
| Perfluorodecanoic acid | 64.5 | cn | 1.78 | 0.445 | ng/L | 1 | | 537 IDA | Total/NA |
| 3-Perfluoropropylpropanoic acid (3:3 FTCA) | 1.20 | J cn | 1.78 | 0.267 | ng/L | 1 | | 537 IDA | Total/NA |
| Perfluorobutanesulfonic acid | 105 | cn | 1.78 | 0.445 | ng/L | 1 | | 537 IDA | Total/NA |
| Perfluoroheptanoic acid | 168 | cn | 1.78 | 0.445 | ng/L | 1 | | 537 IDA | Total/NA |
| Perfluoroheptanesulfonic acid | 112 | cn | 1.78 | 0.445 | ng/L | 1 | | 537 IDA | Total/NA |
| Perfluorononanoic acid | 252 | cn | 1.78 | 0.445 | ng/L | 1 | | 537 IDA | Total/NA |
| Perfluoropropanesulfonic acid | 32.2 | cn | 1.78 | 0.178 | ng/L | 1 | | 537 IDA | Total/NA |
| 6:2 Fluorotelomer carboxylic acid | 4.89 | cn | 1.78 | 0.356 | ng/L | 1 | | 537 IDA | Total/NA |
| Perfluoro-2-methoxyacetic acid (PFMOAA) | 45.1 | cn | 1.78 | 0.178 | ng/L | 1 | | 537 IDA | Total/NA |
| Perfluoroctanesulfonamide | 6.23 | cn | 1.78 | 0.445 | ng/L | 1 | | 537 IDA | Total/NA |
| Perfluoro-4-isopropoxybutanoic acid (PFIpOBA) | 22.6 | cn | 1.78 | 0.178 | ng/L | 1 | | 537 IDA | Total/NA |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | 84.6 | cn | 1.78 | 0.178 | ng/L | 1 | | 537 IDA | Total/NA |
| 3-Perfluoropentylpropanoic acid (5:3 FTCA) | 0.780 | J I B cn | 1.78 | 0.178 | ng/L | 1 | | 537 IDA | Total/NA |

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Env, LLC

Detection Summary

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Client Sample ID: SP-24 (Continued)

Lab Sample ID: 410-66395-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|--|--------|-----------|------|------|------|---------|---------|----------|-----------|
| Perfluoropentanoic acid - DL | 2240 | cn | 17.8 | 4.45 | ng/L | 10 | 537 IDA | Total/NA | |
| Perfluoroctanoic acid - DL | 905 | cn | 17.8 | 4.45 | ng/L | 10 | 537 IDA | Total/NA | |
| Perfluorohexanesulfonic acid - DL | 1670 | cn | 17.8 | 4.45 | ng/L | 10 | 537 IDA | Total/NA | |
| Perfluoro-3-methoxypropanoic acid (PFMPA) - DL | 286 | cn | 17.8 | 1.78 | ng/L | 10 | 537 IDA | Total/NA | |
| Perfluoroctanesulfonic acid - DL2 | 19900 | B cn | 178 | 44.5 | ng/L | 100 | 537 IDA | Total/NA | |
| Perfluorobutanoic acid - DL2 | 4990 | cn | 445 | 178 | ng/L | 100 | 537 IDA | Total/NA | |
| Perfluoropropionic Acid (PFPrA) - DL2 | 3710 | cn | 445 | 178 | ng/L | 100 | 537 IDA | Total/NA | |

Client Sample ID: Trip Blank

Lab Sample ID: 410-66395-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------------------------|--------|-------------|------|-------|------|---------|---------|----------|-----------|
| Perfluoroctanesulfonic acid | 0.737 | J H H3 B cn | 1.73 | 0.432 | ng/L | 1 | 537 IDA | Total/NA | |

Client Sample ID: SP-27

Lab Sample ID: 410-66395-4

No Detections.

Client Sample ID: SP-28

Lab Sample ID: 410-66395-5

No Detections.

Client Sample ID: SP-29

Lab Sample ID: 410-66395-6

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|--|--------|-----------|------|-------|------|---------|---------|----------|-----------|
| Perfluoro-3-methoxypropanoic acid (PFMPA) | 13.1 | cn | 1.85 | 0.185 | ng/L | 1 | 537 IDA | Total/NA | |
| Hexafluoropropylene Oxide Dimer Acid (HFPO-DA) | 9.09 | cn | 2.78 | 0.463 | ng/L | 1 | 537 IDA | Total/NA | |
| Perfluoroctanesulfonic acid | 0.741 | J cn | 1.85 | 0.463 | ng/L | 1 | 537 IDA | Total/NA | |
| Perfluoro-2-(perfluoroethoxy)propionic acid | 5.46 | cn | 1.85 | 0.185 | ng/L | 1 | 537 IDA | Total/NA | |
| Perfluoropentanoic acid | 43.5 | cn | 1.85 | 0.463 | ng/L | 1 | 537 IDA | Total/NA | |
| Perfluorohexanoic acid | 5.00 | I cn | 1.85 | 0.463 | ng/L | 1 | 537 IDA | Total/NA | |
| Perfluoroctanoic acid | 1.07 | J cn | 1.85 | 0.463 | ng/L | 1 | 537 IDA | Total/NA | |
| Perfluorohexanesulfonic acid | 0.665 | J cn | 1.85 | 0.463 | ng/L | 1 | 537 IDA | Total/NA | |
| Perfluorobutanesulfonic acid | 8.21 | cn | 1.85 | 0.463 | ng/L | 1 | 537 IDA | Total/NA | |
| Perfluoroheptanoic acid | 1.43 | J I cn | 1.85 | 0.463 | ng/L | 1 | 537 IDA | Total/NA | |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | 36.0 | cn | 1.85 | 0.185 | ng/L | 1 | 537 IDA | Total/NA | |
| Perfluoropropanesulfonic acid | 3.09 | cn | 1.85 | 0.185 | ng/L | 1 | 537 IDA | Total/NA | |
| Perfluoro-2-methoxyacetic acid (PFMOAA) | 4.26 | cn | 1.85 | 0.185 | ng/L | 1 | 537 IDA | Total/NA | |
| Perfluoro-4-isopropoxybutanoic acid (PFIpOBA) | 0.635 | J cn | 1.85 | 0.185 | ng/L | 1 | 537 IDA | Total/NA | |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | 30.4 | cn | 1.85 | 0.185 | ng/L | 1 | 537 IDA | Total/NA | |
| Perfluorobutanoic acid - DL | 1160 | cn | 46.3 | 18.5 | ng/L | 10 | 537 IDA | Total/NA | |
| Perfluoropropionic Acid (PFPrA) - DL | 1990 | cn | 46.3 | 18.5 | ng/L | 10 | 537 IDA | Total/NA | |

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Env, LLC

Client Sample Results

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Client Sample ID: SP-21

Date Collected: 12/06/21 14:50
Date Received: 12/10/21 10:01

Lab Sample ID: 410-66395-1

Matrix: Water

Method: 537 IDA - EPA 537 Isotope Dilution

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|--------------|---------------|------|-------|------|---|----------------|----------------|---------|
| NVHOS | <0.174 | cn | 1.74 | 0.174 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| Perfluoro (2-ethoxyethane) sulfonic acid | <0.174 | cn | 1.74 | 0.174 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| 1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS) | <0.871 | cn | 4.35 | 0.871 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | 7.75 | cn | 1.74 | 0.174 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| Hexafluoropropylene Oxide Dimer Acid (HFPO-DA) | 5.47 | cn | 2.61 | 0.435 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| Perfluoro-4-ethylcyclohexanesulfonic acid | <0.174 | cn | 1.74 | 0.174 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | <0.174 | cn | 1.74 | 0.174 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| Perfluoroctadecanoic acid | <0.871 | cn | 2.61 | 0.871 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| N-ethylperfluoroctane sulfonamidoethanol (NEtFOSE) | <0.871 | cn | 2.61 | 0.871 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| Perfluoroctanesulfonic acid | <0.435 | cn | 1.74 | 0.435 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| Perfluoroundecanoic acid | <0.435 | cn | 1.74 | 0.435 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| N-methylperfluoroctanesulfonamidoacetic acid (NMeFOSAA) | <0.522 | cn | 1.74 | 0.522 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| R-PSDA | <0.435 | *- cn | 1.74 | 0.435 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| Hydrolyzed PSDA | <0.348 | *- cn | 1.74 | 0.348 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| R-PSDCA | <0.174 | cn | 1.74 | 0.174 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| R-EVE | <0.348 | *- cn | 1.74 | 0.348 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| N-methylperfluoroctane sulfonamidoethanol (NMeFOSE) | <0.871 | cn | 2.61 | 0.871 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| Perfluoro-2-(perfluoroethoxy)propionic acid | 1.99 | cn | 1.74 | 0.174 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| Perfluoropentanoic acid | 23.5 | cn | 1.74 | 0.435 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| Perfluoropentanesulfonic acid | <0.435 | cn | 1.74 | 0.435 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| 6:2 Fluorotelomer sulfonic acid | <1.74 | cn | 4.35 | 1.74 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| 8:2 Fluorotelomer carboxylic acid | <0.348 | cn | 1.74 | 0.348 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| Nafion Byproduct 1 (Nafion BP1) | <2.61 | *- cn | 8.71 | 2.61 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| N-ethylperfluoroctanesulfonamidoacetic acid (NEtFOSAA) | <0.435 | cn | 2.61 | 0.435 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| Perfluorohexanoic acid | 5.11 | cn | 1.74 | 0.435 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| Perfluorododecanoic acid | <0.435 | cn | 1.74 | 0.435 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| N-methylperfluoroctane sulfonamide (NMeFOSA) | <0.871 | cn | 2.61 | 0.871 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| Perfluoroctanoic acid | 0.740 | J cn | 1.74 | 0.435 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| Perfluorodecanoic acid | <0.435 | cn | 1.74 | 0.435 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| Perfluorodecanesulfonic acid | <0.435 | cn | 1.74 | 0.435 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| Perfluorohexanesulfonic acid | <0.435 | cn | 1.74 | 0.435 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| 3-Perfluoropropylpropanoic acid (3:3 FTCA) | <0.261 | cn | 1.74 | 0.261 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| Perfluorobutanesulfonic acid | 4.34 | cn | 1.74 | 0.435 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| Perfluoroheptanoic acid | 1.24 | J I cn | 1.74 | 0.435 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| Perfluoroheptanesulfonic acid | <0.435 | cn | 1.74 | 0.435 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| Perfluorononanoic acid | <0.435 | cn | 1.74 | 0.435 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| Perfluorotetradecanoic acid | <0.435 | cn | 1.74 | 0.435 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | 11.9 | cn | 1.74 | 0.174 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| 8:2 Fluorotelomer sulfonic acid | <0.871 | cn | 2.61 | 0.871 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |

Eurofins Lancaster Laboratories Env, LLC

Client Sample Results

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Client Sample ID: SP-21

Date Collected: 12/06/21 14:50
Date Received: 12/10/21 10:01

Lab Sample ID: 410-66395-1

Matrix: Water

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--|------------------|------------------|---------------|-------|------|-----------------|-----------------|----------------|---------|
| Perfluoro(3,5-dioxahexanoic) acid (PFO2HxA) | <0.174 | cn | 1.74 | 0.174 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| Perfluoro(3,5,7-trioxaoctanoic) acid (PFO3OA) | <0.174 | cn | 1.74 | 0.174 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| Perfluoro(3,5,7,9-tetraoxadecanoic) acid (PFO4DA) | <0.261 | cn | 1.74 | 0.261 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| Perfluoro-3,5,7,9,11-pentaoxadodecanoic acid | <1.74 | cn | 4.35 | 1.74 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| N-ethylperfluoroctane sulfonamide (N _{Et} FOSA) | <0.871 | cn | 4.35 | 0.871 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| Perfluoropropanesulfonic acid | 0.853 | J cn | 1.74 | 0.174 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| 6:2 Fluorotelomer carboxylic acid | <0.348 | cn | 1.74 | 0.348 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| 10:2 Fluorotelomer carboxylic acid | <0.435 | cn | 1.74 | 0.435 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| Perfluoro-2-methoxyacetic acid (PFMOAA) | 1.19 | J cn | 1.74 | 0.174 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| Perfluorohexadecanoic acid | <0.871 | cn | 2.61 | 0.871 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| Perfluorononanesulfonic acid | <0.435 | cn | 1.74 | 0.435 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| EVE Acid | <2.61 | *- cn | 8.71 | 2.61 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| 8:2 Fluorotelomer unsaturated acid | <0.174 | cn | 1.74 | 0.174 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| 6:2 Fluorotelomer unsaturated acid | <0.174 | cn | 1.74 | 0.174 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| 10:2 Fluorotelomer unsaturated acid | <0.174 | cn | 1.74 | 0.174 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| Perfluorotridecanoic acid | <0.435 | cn | 1.74 | 0.435 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| Hydro-PS Acid | <0.174 | cn | 1.74 | 0.174 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| Perfluorooctanesulfonamide | <0.435 | cn | 1.74 | 0.435 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| 9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS) | <0.435 | cn | 1.74 | 0.435 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| 4:2 Fluorotelomer sulfonic acid | <0.435 | cn | 1.74 | 0.435 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| 11-Chloroeicosfluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS) | <0.435 | cn | 1.74 | 0.435 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| Hydro-EVE Acid | <0.174 | cn | 1.74 | 0.174 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| Perfluorododecanesulfonic acid | <0.435 | cn | 2.61 | 0.435 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| Perfluoro-4-isopropoxybutanoic acid (PFIpOBA) | 0.362 | J cn | 1.74 | 0.174 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| 3-Perfluoroheptylpropanoic acid (7:3 FTCA) | <0.261 | *- cn | 1.74 | 0.261 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | 9.00 | cn | 1.74 | 0.174 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| 3-Perfluoropentylpropanoic acid (5:3 FTCA) | <0.174 | cn | 1.74 | 0.174 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | <0.435 | cn | 1.74 | 0.435 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| MTP | <1.74 | cn | 4.35 | 1.74 | ng/L | | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| Isotope Dilution | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac | |
| d5-NEtFOSAA | 104 | cn | 37 - 164 | | | 12/13/21 08:36 | 12/15/21 02:33 | 1 | |
| d3-NMeFOSAA | 96 | cn | 32 - 151 | | | 12/13/21 08:36 | 12/15/21 02:33 | 1 | |
| 13C3 HFPO-DA | 114 | cn | 20 - 153 | | | 12/13/21 08:36 | 12/15/21 02:33 | 1 | |
| d7-N-MeFOSE-M | 60 | cn | 10 - 143 | | | 12/13/21 08:36 | 12/15/21 02:33 | 1 | |
| d9-N-EtFOSE-M | 62 | cn | 10 - 142 | | | 12/13/21 08:36 | 12/15/21 02:33 | 1 | |
| M2-6:2 FTS | 97 | cn | 29 - 189 | | | 12/13/21 08:36 | 12/15/21 02:33 | 1 | |
| M2-8:2 FTS | 115 | cn | 34 - 182 | | | 12/13/21 08:36 | 12/15/21 02:33 | 1 | |
| 13C3 PFBS | 141 | cn | 19 - 178 | | | 12/13/21 08:36 | 12/15/21 02:33 | 1 | |
| M2-4:2 FTS | 117 | cn | 20 - 187 | | | 12/13/21 08:36 | 12/15/21 02:33 | 1 | |

Client Sample Results

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Client Sample ID: SP-21

Date Collected: 12/06/21 14:50
Date Received: 12/10/21 10:01

Lab Sample ID: 410-66395-1

Matrix: Water

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-------------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 13C5 PFHxA | 107 | cn | 31 - 142 | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| 13C9 PFNA | 105 | cn | 47 - 136 | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| 13C6 PFDA | 108 | cn | 47 - 128 | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| 13C7 PFUnA | 105 | cn | 40 - 135 | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| 13C3 PFHxS | 115 | cn | 32 - 145 | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| 13C2-PFDoDA | 91 | cn | 28 - 136 | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| d5-NEtPFOSA | 4 | *5- cn | 10 - 108 | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| d3-NMePFOSA | 5 | *5- cn | 10 - 107 | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| 13C2-2-Perfluorohexylethanoic acid | 162 | *5+ cn | 50 - 150 | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| 13C2-2-Perfluoroctylethanoic acid | 165 | *5+ cn | 50 - 150 | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| 13C2-2-Perfluorodecylethanoic acid | 146 | cn | 50 - 150 | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| 13C2-2H-Perfluoro-2-octenoic acid | 83 | cn | 50 - 150 | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| 13C2-2H-Perfluoro-2-decanoic acid | 81 | cn | 50 - 150 | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| 13C2-2H-Perfluoro-2-dodecanoic acid | 73 | cn | 50 - 150 | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| 13C4 PFBA | 108 | cn | 41 - 132 | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| 13C5 PFPeA | 133 | cn | 33 - 155 | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| 13C4 PFHpA | 107 | cn | 30 - 144 | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| 13C8 PFOA | 107 | cn | 49 - 127 | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| 13C8 PFOS | 104 | cn | 49 - 126 | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| 13C8 FOSA | 104 | cn | 10 - 143 | 12/13/21 08:36 | 12/15/21 02:33 | 1 |
| 13C2 PFTeDA | 87 | cn | 10 - 144 | 12/13/21 08:36 | 12/15/21 02:33 | 1 |

Method: 537 IDA - EPA 537 Isotope Dilution - DL

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------------|-----------|-----------|----------|------|------|---|----------------|----------------|---------|
| Perfluorobutanoic acid | 446 | cn | 43.5 | 17.4 | ng/L | | 12/13/21 08:36 | 12/15/21 02:44 | 10 |
| Perfluoropropionic Acid (PFPRA) | 412 | cn | 43.5 | 17.4 | ng/L | | 12/13/21 08:36 | 12/15/21 02:44 | 10 |
| Isotope Dilution | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 13C4 PFBA | 115 | cn | 41 - 132 | | | | 12/13/21 08:36 | 12/15/21 02:44 | 10 |

Client Sample ID: SP-24

Date Collected: 12/08/21 10:38
Date Received: 12/10/21 10:01

Lab Sample ID: 410-66395-2

Matrix: Water

Method: 537 IDA - EPA 537 Isotope Dilution

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--|--------|-----------|------|-------|------|---|----------------|----------------|---------|
| NVHOS | <0.178 | cn | 1.78 | 0.178 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| Perfluoro (2-ethoxyethane) sulfonic acid | <0.178 | cn | 1.78 | 0.178 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| 1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS) | <0.890 | cn | 4.45 | 0.890 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| Perfluoro-3-methoxypropanoic acid (PMPA) | 117 | cn | 1.78 | 0.178 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| Hexafluoropropylene Oxide Dimer Acid (HFPO-DA) | 160 | cn | 2.67 | 0.445 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| Perfluoro-4-ethylcyclohexanesulfonic acid | 28.4 | cn | 1.78 | 0.178 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | <0.178 | cn | 1.78 | 0.178 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| Perfluoroctadecanoic acid | <0.890 | cn | 2.67 | 0.890 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| N-ethylperfluoroctane sulfonamidoethanol (NEtFOSE) | <0.890 | cn | 2.67 | 0.890 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |

Eurofins Lancaster Laboratories Env, LLC

Client Sample Results

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Client Sample ID: SP-24

Lab Sample ID: 410-66395-2

Matrix: Water

Date Collected: 12/08/21 10:38

Date Received: 12/10/21 10:01

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|-------------|---------------|------|-------|------|---|----------------|----------------|---------|
| Perfluoroundecanoic acid | <0.445 | cn | 1.78 | 0.445 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| N-methylperfluoroctanesulfonamidoacetic acid (NMeFOSAA) | <0.534 | cn | 1.78 | 0.534 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| R-PSDA | <0.445 | *- cn | 1.78 | 0.445 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| Hydrolyzed PSDA | <0.356 | *- cn | 1.78 | 0.356 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| R-PSDCA | <0.178 | cn | 1.78 | 0.178 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| R-EVE | <0.356 | *- cn | 1.78 | 0.356 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| N-methylperfluoroctane sulfonamidoethanol (NMeFOSE) | <0.890 | cn | 2.67 | 0.890 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| Perfluoro-2-(perfluoroethoxy)propionic acid | 49.3 | cn | 1.78 | 0.178 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| Perfluoropentanesulfonic acid | 20.9 | cn | 1.78 | 0.445 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| 6:2 Fluorotelomer sulfonic acid | <1.78 | cn | 4.45 | 1.78 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| 8:2 Fluorotelomer carboxylic acid | <0.356 | cn | 1.78 | 0.356 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| Nafion Byproduct 1 (Nafion BP1) | <2.67 | *- cn | 8.90 | 2.67 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| N-ethylperfluoroctanesulfonamidoacetic acid (NEtFOSAA) | 2.96 | I B cn | 2.67 | 0.445 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| Perfluorohexanoic acid | 242 | cn | 1.78 | 0.445 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| Perfluorododecanoic acid | <0.445 | cn | 1.78 | 0.445 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| N-methylperfluoroctane sulfonamide (NMeFOSA) | <0.890 | cn | 2.67 | 0.890 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| Perfluorodecanoic acid | 64.5 | cn | 1.78 | 0.445 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| Perfluorodecanesulfonic acid | <0.445 | cn | 1.78 | 0.445 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| 3-Perfluoropropylpropanoic acid (3:3 FTCA) | 1.20 | J cn | 1.78 | 0.267 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| Perfluorobutanesulfonic acid | 105 | cn | 1.78 | 0.445 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| Perfluoroheptanoic acid | 168 | cn | 1.78 | 0.445 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| Perfluoroheptanesulfonic acid | 112 | cn | 1.78 | 0.445 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| Perfluorononanoic acid | 252 | cn | 1.78 | 0.445 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| Perfluorotetradecanoic acid | <0.445 | cn | 1.78 | 0.445 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| 8:2 Fluorotelomer sulfonic acid | <0.890 | cn | 2.67 | 0.890 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| Perfluoro(3,5-dioxahexanoic) acid (PFO2HxA) | <0.178 | cn | 1.78 | 0.178 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| Perfluoro(3,5,7-trioxaoctanoic) acid (PFO3OA) | <0.178 | cn | 1.78 | 0.178 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| Perfluoro(3,5,7,9-tetraoxadecanoic) acid (PFO4DA) | <0.267 | cn | 1.78 | 0.267 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| Perfluoro-3,5,7,9,11-pentaoxadodecanoic acid | <1.78 | cn | 4.45 | 1.78 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| N-ethylperfluoroctane sulfonamide (NETFOSA) | <0.890 | cn | 4.45 | 0.890 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| Perfluoropropanesulfonic acid | 32.2 | cn | 1.78 | 0.178 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| 6:2 Fluorotelomer carboxylic acid | 4.89 | cn | 1.78 | 0.356 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| 10:2 Fluorotelomer carboxylic acid | <0.445 | cn | 1.78 | 0.445 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| Perfluoro-2-methoxyacetic acid (PFMOAA) | 45.1 | cn | 1.78 | 0.178 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| Perfluorohexadecanoic acid | <0.890 | cn | 2.67 | 0.890 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| Perfluorononanesulfonic acid | <0.445 | cn | 1.78 | 0.445 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| EVE Acid | <2.67 | *- cn | 8.90 | 2.67 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| 8:2 Fluorotelomer unsaturated acid | <0.178 | cn | 1.78 | 0.178 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| 6:2 Fluorotelomer unsaturated acid | <0.178 | cn | 1.78 | 0.178 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| 10:2 Fluorotelomer unsaturated acid | <0.178 | cn | 1.78 | 0.178 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |

Client Sample Results

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Client Sample ID: SP-24

Lab Sample ID: 410-66395-2

Matrix: Water

Date Collected: 12/08/21 10:38

Date Received: 12/10/21 10:01

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--|------------------|------------------|---------------|-------|------|---|-----------------|-----------------|----------------|
| Perfluorotridecanoic acid | <0.445 | cn | 1.78 | 0.445 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| Hydro-PS Acid | <0.178 | cn | 1.78 | 0.178 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| Perfluoroctanesulfonamide | 6.23 | cn | 1.78 | 0.445 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| 9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS) | <0.445 | cn | 1.78 | 0.445 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| 4:2 Fluorotelomer sulfonic acid | <0.445 | cn | 1.78 | 0.445 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| 11-Chloroeicosafuoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS) | <0.445 | cn | 1.78 | 0.445 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| Hydro-EVE Acid | <0.178 | cn | 1.78 | 0.178 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| Perfluorododecanesulfonic acid | <0.445 | cn | 2.67 | 0.445 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| Perfluoro-4-isopropoxybutanoic acid (PFIpOBA) | 22.6 | cn | 1.78 | 0.178 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| 3-Perfluoroheptylpropanoic acid (7:3 FTCA) | <0.267 | *- cn | 1.78 | 0.267 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | 84.6 | cn | 1.78 | 0.178 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| 3-Perfluoropentylpropanoic acid (5:3 FTCA) | 0.780 | J I B cn | 1.78 | 0.178 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | <0.445 | cn | 1.78 | 0.445 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| MTP | <1.78 | cn | 4.45 | 1.78 | ng/L | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| Isotope Dilution | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| d5-NEtFOSAA | 137 | cn | 37 - 164 | | | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| d3-NMeFOSAA | 119 | cn | 32 - 151 | | | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| 13C3 HFPO-DA | 131 | cn | 20 - 153 | | | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| d7-N-MeFOSE-M | 84 | cn | 10 - 143 | | | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| d9-N-EtFOSE-M | 93 | cn | 10 - 142 | | | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| M2-6:2 FTS | 84 | cn | 29 - 189 | | | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| M2-8:2 FTS | 96 | cn | 34 - 182 | | | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| 13C3 PFBS | 240 | *5+ cn | 19 - 178 | | | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| M2-4:2 FTS | 115 | cn | 20 - 187 | | | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| 13C5 PFHxA | 114 | cn | 31 - 142 | | | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| 13C9 PFNA | 107 | cn | 47 - 136 | | | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| 13C6 PFDA | 101 | cn | 47 - 128 | | | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| 13C7 PFUnA | 125 | cn | 40 - 135 | | | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| 13C3 PFHxS | 101 | cn | 32 - 145 | | | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| 13C2-PFDoDA | 106 | cn | 28 - 136 | | | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| d5-NEtPFOSA | 69 | cn | 10 - 108 | | | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| d3-NMePFOSA | 80 | cn | 10 - 107 | | | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| 13C2-2-Perfluorohexylethanoic acid | 180 | *5+ cn | 50 - 150 | | | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| 13C2-2-Perfluoroctylethanoic acid | 160 | *5+ cn | 50 - 150 | | | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| 13C2-2-Perfluorodecylethanoic acid | 186 | *5+ cn | 50 - 150 | | | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| 13C2-2H-Perfluoro-2-octenoic acid | 92 | cn | 50 - 150 | | | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| 13C2-2H-Perfluoro-2-decenoic acid | 83 | cn | 50 - 150 | | | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| 13C2-2H-Perfluoro-2-dodecenoic acid | 95 | cn | 50 - 150 | | | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| 13C4 PFBA | 103 | cn | 41 - 132 | | | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| 13C5 PPPeA | 170 | *5+ cn | 33 - 155 | | | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| 13C4 PFHpA | 85 | cn | 30 - 144 | | | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| 13C8 PFOA | 95 | cn | 49 - 127 | | | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| 13C8 PFOS | 134 | *5+ cn | 49 - 126 | | | | 12/13/21 08:36 | 12/15/21 02:55 | 1 |

Eurofins Lancaster Laboratories Env, LLC

Client Sample Results

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Client Sample ID: SP-24

Lab Sample ID: 410-66395-2

Matrix: Water

Date Collected: 12/08/21 10:38

Date Received: 12/10/21 10:01

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------|-----------|-----------|----------|----------------|----------------|---------|
| 13C8 FOSA | 139 | cn | 10 - 143 | 12/13/21 08:36 | 12/15/21 02:55 | 1 |
| 13C2 PFTeDA | 94 | cn | 10 - 144 | 12/13/21 08:36 | 12/15/21 02:55 | 1 |

Method: 537 IDA - EPA 537 Isotope Dilution - DL

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|-----------|-----------|----------|------|------|---|----------------|----------------|---------|
| Perfluoropentanoic acid | 2240 | cn | 17.8 | 4.45 | ng/L | | 12/13/21 08:36 | 12/15/21 03:17 | 10 |
| Perfluoroctanoic acid | 905 | cn | 17.8 | 4.45 | ng/L | | 12/13/21 08:36 | 12/15/21 03:17 | 10 |
| Perfluorohexanesulfonic acid | 1670 | cn | 17.8 | 4.45 | ng/L | | 12/13/21 08:36 | 12/15/21 03:17 | 10 |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | 286 | cn | 17.8 | 1.78 | ng/L | | 12/13/21 08:36 | 12/15/21 03:17 | 10 |
| Isotope Dilution | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 13C3 PFHxS | 111 | cn | 32 - 145 | | | | 12/13/21 08:36 | 12/15/21 03:17 | 10 |
| 13C4 PFBA | 106 | cn | 41 - 132 | | | | 12/13/21 08:36 | 12/15/21 03:17 | 10 |
| 13C5 PFPeA | 124 | cn | 33 - 155 | | | | 12/13/21 08:36 | 12/15/21 03:17 | 10 |
| 13C8 PFOA | 98 | cn | 49 - 127 | | | | 12/13/21 08:36 | 12/15/21 03:17 | 10 |

Method: 537 IDA - EPA 537 Isotope Dilution - DL2

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|----------------------------------|-----------|-----------|----------|------|------|---|----------------|----------------|---------|
| Perfluorooctanesulfonic acid | 19900 | B cn | 178 | 44.5 | ng/L | | 12/13/21 08:36 | 12/15/21 03:28 | 100 |
| Perfluorobutanoic acid | 4990 | cn | 445 | 178 | ng/L | | 12/13/21 08:36 | 12/15/21 03:28 | 100 |
| Perfluoropropionic Acid (PFPPrA) | 3710 | cn | 445 | 178 | ng/L | | 12/13/21 08:36 | 12/15/21 03:28 | 100 |
| Isotope Dilution | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 13C4 PFBA | 164 | *5+ cn | 41 - 132 | | | | 12/13/21 08:36 | 12/15/21 03:28 | 100 |
| 13C8 PFOS | 125 | cn | 49 - 126 | | | | 12/13/21 08:36 | 12/15/21 03:28 | 100 |

Client Sample ID: Trip Blank

Lab Sample ID: 410-66395-3

Matrix: Water

Date Collected: 11/23/21 00:00

Date Received: 12/10/21 10:01

Method: 537 IDA - EPA 537 Isotope Dilution

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--|--------------|--------------------|-------------|--------------|-------------|----------|-----------------------|-----------------------|----------|
| NVHOS | <0.173 | H H3 cn | 1.73 | 0.173 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Perfluoro (2-ethoxyethane) sulfonic acid | <0.173 | H H3 cn | 1.73 | 0.173 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| 1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS) | <0.864 | H H3 cn | 4.32 | 0.864 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Perfluoro-3-methoxypropanoic acid (PMMPA) | <0.173 | H H3 cn | 1.73 | 0.173 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Hexafluoropropylene Oxide Dimer Acid (HFPO-DA) | <0.432 | H H3 cn | 2.59 | 0.432 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Perfluoro-4-ethylcyclohexanesulfonic acid | <0.173 | H H3 cn | 1.73 | 0.173 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | <0.173 | H H3 cn | 1.73 | 0.173 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Perfluorooctadecanoic acid | <0.864 | H H3 cn | 2.59 | 0.864 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| N-ethylperfluoroctane sulfonamidoethanol (NMeFOSE) | <0.864 | H H3 cn | 2.59 | 0.864 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Perfluorooctanesulfonic acid | 0.737 | J H H3 B cn | 1.73 | 0.432 | ng/L | D | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Perfluoroundecanoic acid | <0.432 | H H3 cn | 1.73 | 0.432 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA) | <0.518 | H H3 cn | 1.73 | 0.518 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |

Client Sample Results

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Client Sample ID: Trip Blank
Date Collected: 11/23/21 00:00
Date Received: 12/10/21 10:01

Lab Sample ID: 410-66395-3
Matrix: Water

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--|--------|------------|------|-------|------|---|----------------|----------------|---------|
| R-PSDA | <0.432 | H *- H3 cn | 1.73 | 0.432 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Hydrolyzed PSDA | <0.346 | H *- H3 cn | 1.73 | 0.346 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| R-PSDCA | <0.173 | H H3 cn | 1.73 | 0.173 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| R-EVE | <0.346 | H H3 *- cn | 1.73 | 0.346 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| N-methylperfluoroctane sulfonamidoethanol (NMeFOSE) | <0.864 | H H3 cn | 2.59 | 0.864 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Perfluoro-2-(perfluoroethoxy)propionic acid | <0.173 | H H3 cn | 1.73 | 0.173 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Perfluoropentanoic acid | <0.432 | H H3 cn | 1.73 | 0.432 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Perfluoropentanesulfonic acid | <0.432 | H H3 cn | 1.73 | 0.432 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| 6:2 Fluorotelomer sulfonic acid | <1.73 | H H3 cn | 4.32 | 1.73 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| 8:2 Fluorotelomer carboxylic acid | <0.346 | H H3 cn | 1.73 | 0.346 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Nafion Byproduct 1 (Nafion BP1) | <2.59 | H *- H3 cn | 8.64 | 2.59 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| N-ethylperfluoroctanesulfonamidoacetic acid (NEtFOSAA) | <0.432 | H H3 cn | 2.59 | 0.432 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Perfluorohexanoic acid | <0.432 | H H3 cn | 1.73 | 0.432 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Perfluorododecanoic acid | <0.432 | H H3 cn | 1.73 | 0.432 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| N-methylperfluoroctane sulfonamide (NMeFOSA) | <0.864 | H H3 cn | 2.59 | 0.864 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Perfluoroctanoic acid | <0.432 | H H3 cn | 1.73 | 0.432 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Perfluorodecanoic acid | <0.432 | H H3 cn | 1.73 | 0.432 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Perfluorodecanesulfonic acid | <0.432 | H H3 cn | 1.73 | 0.432 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Perfluorohexanesulfonic acid | <0.432 | H H3 cn | 1.73 | 0.432 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| 3-Perfluoropropylpropanoic acid (3:3 FTCA) | <0.259 | H H3 cn | 1.73 | 0.259 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Perfluorobutanoic acid | <1.73 | H H3 cn | 4.32 | 1.73 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Perfluorobutanesulfonic acid | <0.432 | H H3 cn | 1.73 | 0.432 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Perfluoroheptanoic acid | <0.432 | H H3 cn | 1.73 | 0.432 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Perfluoroheptanesulfonic acid | <0.432 | H H3 cn | 1.73 | 0.432 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Perfluorononanoic acid | <0.432 | H H3 cn | 1.73 | 0.432 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Perfluorotetradecanoic acid | <0.432 | H H3 cn | 1.73 | 0.432 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | <0.173 | H H3 cn | 1.73 | 0.173 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| 8:2 Fluorotelomer sulfonic acid | <0.864 | H H3 cn | 2.59 | 0.864 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Perfluoro(3,5-dioxahexanoic) acid (PFO2HxA) | <0.173 | H H3 cn | 1.73 | 0.173 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Perfluoro(3,5,7-trioxaoctanoic) acid (PFO3OA) | <0.173 | H H3 cn | 1.73 | 0.173 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Perfluoro(3,5,7,9-tetraoxadecanoic) acid (PFO4DA) | <0.259 | H H3 cn | 1.73 | 0.259 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Perfluoro-3,5,7,9,11-pentaoxadodecanoic acid | <1.73 | H H3 cn | 4.32 | 1.73 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| N-ethylperfluoroctane sulfonamide (NEtFOSA) | <0.864 | H H3 cn | 4.32 | 0.864 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Perfluoropropionic Acid (PFPrA) | <1.73 | H H3 cn | 4.32 | 1.73 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Perfluoropropanesulfonic acid | <0.173 | H H3 cn | 1.73 | 0.173 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| 6:2 Fluorotelomer carboxylic acid | <0.346 | H H3 cn | 1.73 | 0.346 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| 10:2 Fluorotelomer carboxylic acid | <0.432 | H H3 cn | 1.73 | 0.432 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Perfluoro-2-methoxyacetic acid (PFMOAA) | <0.173 | H H3 cn | 1.73 | 0.173 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Perfluorohexamadeconoic acid | <0.864 | H H3 cn | 2.59 | 0.864 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Perfluorononanesulfonic acid | <0.432 | H H3 cn | 1.73 | 0.432 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |

Client Sample Results

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Client Sample ID: Trip Blank
Date Collected: 11/23/21 00:00
Date Received: 12/10/21 10:01

Lab Sample ID: 410-66395-3
Matrix: Water

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|-----------|------------|----------|-------|------|---|----------------|----------------|---------|
| EVE Acid | <2.59 | H *- H3 cn | 8.64 | 2.59 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| 8:2 Fluorotelomer unsaturated acid | <0.173 | H H3 cn | 1.73 | 0.173 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| 6:2 Fluorotelomer unsaturated acid | <0.173 | H H3 cn | 1.73 | 0.173 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| 10:2 Fluorotelomer unsaturated acid | <0.173 | H H3 cn | 1.73 | 0.173 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Perfluorotridecanoic acid | <0.432 | H H3 cn | 1.73 | 0.432 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Hydro-PS Acid | <0.173 | H H3 cn | 1.73 | 0.173 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Perfluoroctanesulfonamide | <0.432 | H H3 cn | 1.73 | 0.432 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| 9-Chlorohexadecafluoro-3-oxanone | <0.432 | H H3 cn | 1.73 | 0.432 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| e-1-sulfonic acid(9Cl-PF3ONS) | <0.432 | H H3 cn | 1.73 | 0.432 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| 4:2 Fluorotelomer sulfonic acid | <0.432 | H H3 cn | 1.73 | 0.432 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| 11-Chloroeicosfluoro-3-oxaundecan | <0.432 | H H3 cn | 1.73 | 0.432 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| e-1-sulfonic acid (11Cl-PF3OUdS) | <0.432 | H H3 cn | 1.73 | 0.432 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Hydro-EVE Acid | <0.173 | H H3 cn | 1.73 | 0.173 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Perfluorododecanesulfonic acid | <0.432 | H H3 cn | 2.59 | 0.432 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Perfluoro-4-isopropoxybutanoic acid (PFIpOBA) | <0.173 | H H3 cn | 1.73 | 0.173 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| 3-Perfluoroheptylpropanoic acid (7:3 FTCA) | <0.259 | H *- H3 cn | 1.73 | 0.259 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | <0.173 | H H3 cn | 1.73 | 0.173 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| 3-Perfluoropentylpropanoic acid (5:3 FTCA) | <0.173 | H H3 cn | 1.73 | 0.173 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | <0.432 | H H3 cn | 1.73 | 0.432 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| MTP | <1.73 | H H3 cn | 4.32 | 1.73 | ng/L | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| Isotope Dilution | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| d5-NEtFOSAA | 116 | cn | 37 - 164 | | | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| d3-NMeFOSAA | 97 | cn | 32 - 151 | | | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| 13C3 HFPO-DA | 116 | cn | 20 - 153 | | | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| d7-N-MeFOSE-M | 79 | cn | 10 - 143 | | | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| d9-N-EtFOSE-M | 83 | cn | 10 - 142 | | | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| M2-6:2 FTS | 101 | cn | 29 - 189 | | | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| M2-8:2 FTS | 114 | cn | 34 - 182 | | | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| 13C3 PFBS | 114 | cn | 19 - 178 | | | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| M2-4:2 FTS | 108 | cn | 20 - 187 | | | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| 13C5 PFHxA | 113 | cn | 31 - 142 | | | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| 13C9 PFNA | 104 | cn | 47 - 136 | | | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| 13C6 PFDA | 109 | cn | 47 - 128 | | | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| 13C7 PFUnA | 109 | cn | 40 - 135 | | | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| 13C3 PFHxS | 118 | cn | 32 - 145 | | | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| 13C2-2-PFDoDA | 105 | cn | 28 - 136 | | | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| d5-NEtPFOSA | 59 | cn | 10 - 108 | | | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| d3-NMePFOSA | 58 | cn | 10 - 107 | | | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| 13C2-2-Perfluorohexylethanoic acid | 169 | *5+ cn | 50 - 150 | | | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| 13C2-2-Perfluorooctylethanoic acid | 147 | cn | 50 - 150 | | | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| 13C2-2-Perfluorodecylethanoic acid | 145 | cn | 50 - 150 | | | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| 13C2-2H-Perfluoro-2-octenoic acid | 87 | cn | 50 - 150 | | | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| 13C2-2H-Perfluoro-2-decanoic acid | 77 | cn | 50 - 150 | | | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| 13C2-2H-Perfluoro-2-dodecanoic acid | 80 | cn | 50 - 150 | | | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| 13C4 PFBA | 106 | cn | 41 - 132 | | | | 12/13/21 08:36 | 12/15/21 03:39 | 1 |

Eurofins Lancaster Laboratories Env, LLC

Client Sample Results

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Client Sample ID: Trip Blank
Date Collected: 11/23/21 00:00
Date Received: 12/10/21 10:01

Lab Sample ID: 410-66395-3
Matrix: Water

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|------------------|-----------|-----------|----------|----------------|----------------|---------|
| 13C5 PFPeA | 117 | cn | 33 - 155 | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| 13C4 PFHpA | 108 | cn | 30 - 144 | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| 13C8 PFOA | 105 | cn | 49 - 127 | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| 13C8 PFOS | 110 | cn | 49 - 126 | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| 13C8 FOSA | 92 | cn | 10 - 143 | 12/13/21 08:36 | 12/15/21 03:39 | 1 |
| 13C2 PFTeDA | 106 | cn | 10 - 144 | 12/13/21 08:36 | 12/15/21 03:39 | 1 |

Client Sample ID: SP-27
Date Collected: 12/09/21 10:01
Date Received: 12/10/21 10:01

Lab Sample ID: 410-66395-4
Matrix: Water

Method: 537 IDA - EPA 537 Isotope Dilution

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|--------|-----------|------|-------|------|---|----------------|----------------|---------|
| NVHOS | <0.186 | cn | 1.86 | 0.186 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Perfluoro (2-ethoxyethane) sulfonic acid | <0.186 | cn | 1.86 | 0.186 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| 1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS) | <0.928 | cn | 4.64 | 0.928 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Perfluoro-3-methoxypropanoic acid (PMPA) | <0.186 | cn | 1.86 | 0.186 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Hexafluoropropylene Oxide Dimer Acid (HFPO-DA) | <0.464 | cn | 2.78 | 0.464 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Perfluoro-4-ethylcyclohexanesulfonic acid | <0.186 | cn | 1.86 | 0.186 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | <0.186 | cn | 1.86 | 0.186 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Perfluoroctadecanoic acid | <0.928 | cn | 2.78 | 0.928 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| N-ethylperfluoroctane sulfonamidoethanol (NMeFOSE) | <0.928 | cn | 2.78 | 0.928 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Perfluoroctanesulfonic acid | <0.464 | cn | 1.86 | 0.464 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Perfluoroundecanoic acid | <0.464 | cn | 1.86 | 0.464 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| N-methylperfluoroctanesulfonamidoacetic acid (NMeFOSAA) | <0.557 | cn | 1.86 | 0.557 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| R-PSDA | <0.464 | *- cn | 1.86 | 0.464 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Hydrolyzed PSDA | <0.371 | *- cn | 1.86 | 0.371 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| R-PSDCA | <0.186 | cn | 1.86 | 0.186 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| R-EVE | <0.371 | *- cn | 1.86 | 0.371 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| N-methylperfluoroctane sulfonamidoethanol (NMeFOSE) | <0.928 | cn | 2.78 | 0.928 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Perfluoro-2-(perfluoroethoxy)propionic acid | <0.186 | cn | 1.86 | 0.186 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Perfluoropentanoic acid | <0.464 | cn | 1.86 | 0.464 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Perfluoropentanesulfonic acid | <0.464 | cn | 1.86 | 0.464 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| 6:2 Fluorotelomer sulfonic acid | <1.86 | cn | 4.64 | 1.86 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| 8:2 Fluorotelomer carboxylic acid | <0.371 | cn | 1.86 | 0.371 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Nafion Byproduct 1 (Nafion BP1) | <2.78 | *- cn | 9.28 | 2.78 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| N-ethylperfluoroctanesulfonamidoacetic acid (NMeFOSAA) | <0.464 | cn | 2.78 | 0.464 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Perfluorohexanoic acid | <0.464 | cn | 1.86 | 0.464 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Perfluorododecanoic acid | <0.464 | cn | 1.86 | 0.464 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| N-methylperfluoroctane sulfonamide (NMeFOSA) | <0.928 | cn | 2.78 | 0.928 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Perfluoroctanoic acid | <0.464 | cn | 1.86 | 0.464 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |

Eurofins Lancaster Laboratories Env, LLC

Client Sample Results

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Client Sample ID: SP-27

Date Collected: 12/09/21 10:01

Date Received: 12/10/21 10:01

Lab Sample ID: 410-66395-4

Matrix: Water

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--|--------|-----------|------|-------|------|---|----------------|----------------|---------|
| Perfluorodecanoic acid | <0.464 | cn | 1.86 | 0.464 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Perfluorodecanesulfonic acid | <0.464 | cn | 1.86 | 0.464 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Perfluorohexanesulfonic acid | <0.464 | cn | 1.86 | 0.464 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| 3-Perfluoropropylpropanoic acid (3:3 FTCA) | <0.278 | cn | 1.86 | 0.278 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Perfluorobutanoic acid | <1.86 | cn | 4.64 | 1.86 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Perfluorobutanesulfonic acid | <0.464 | cn | 1.86 | 0.464 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Perfluoroheptanoic acid | <0.464 | cn | 1.86 | 0.464 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Perfluoroheptanesulfonic acid | <0.464 | cn | 1.86 | 0.464 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Perfluorononanoic acid | <0.464 | cn | 1.86 | 0.464 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Perfluorotetradecanoic acid | <0.464 | cn | 1.86 | 0.464 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | <0.186 | cn | 1.86 | 0.186 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| 8:2 Fluorotelomer sulfonic acid | <0.928 | cn | 2.78 | 0.928 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Perfluoro(3,5-dioxahexanoic) acid (PFO2HxA) | <0.186 | cn | 1.86 | 0.186 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Perfluoro(3,5,7-trioxaoctanoic) acid (PFO3OA) | <0.186 | cn | 1.86 | 0.186 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Perfluoro(3,5,7,9-tetraoxadecanoic) acid (PFO4DA) | <0.278 | cn | 1.86 | 0.278 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Perfluoro-3,5,7,9,11-pentaoxadodecanoic acid | <1.86 | cn | 4.64 | 1.86 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| N-ethylperfluoroctane sulfonamide (N _{Et} FOSA) | <0.928 | cn | 4.64 | 0.928 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Perfluoropropionic Acid (PFPPA) | <1.86 | cn | 4.64 | 1.86 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Perfluoropropanesulfonic acid | <0.186 | cn | 1.86 | 0.186 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| 6:2 Fluorotelomer carboxylic acid | <0.371 | cn | 1.86 | 0.371 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| 10:2 Fluorotelomer carboxylic acid | <0.464 | cn | 1.86 | 0.464 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Perfluoro-2-methoxyacetic acid (PFMOAA) | <0.186 | cn | 1.86 | 0.186 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Perfluorohexadecanoic acid | <0.928 | cn | 2.78 | 0.928 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Perfluorononanesulfonic acid | <0.464 | cn | 1.86 | 0.464 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| EVE Acid | <2.78 | *- cn | 9.28 | 2.78 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| 8:2 Fluorotelomer unsaturated acid | <0.186 | cn | 1.86 | 0.186 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| 6:2 Fluorotelomer unsaturated acid | <0.186 | cn | 1.86 | 0.186 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| 10:2 Fluorotelomer unsaturated acid | <0.186 | cn | 1.86 | 0.186 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Perfluorotridecanoic acid | <0.464 | cn | 1.86 | 0.464 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Hydro-PS Acid | <0.186 | cn | 1.86 | 0.186 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Perfluoroctanesulfonamide | <0.464 | cn | 1.86 | 0.464 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| 9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS) | <0.464 | cn | 1.86 | 0.464 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| 4:2 Fluorotelomer sulfonic acid | <0.464 | cn | 1.86 | 0.464 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| 11-Chloroeicosfluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS) | <0.464 | cn | 1.86 | 0.464 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Hydro-EVE Acid | <0.186 | cn | 1.86 | 0.186 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Perfluorododecanesulfonic acid | <0.464 | cn | 2.78 | 0.464 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Perfluoro-4-isopropoxybutanoic acid (PFIpOBA) | <0.186 | cn | 1.86 | 0.186 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| 3-Perfluoroheptylpropanoic acid (7:3 FTCA) | <0.278 | *- cn | 1.86 | 0.278 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | <0.186 | cn | 1.86 | 0.186 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |

Client Sample Results

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Client Sample ID: SP-27

Date Collected: 12/09/21 10:01
Date Received: 12/10/21 10:01

Lab Sample ID: 410-66395-4

Matrix: Water

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|-----------|-----------|----------|-------|------|---|----------------|----------------|---------|
| 3-Perfluoropentylpropanoic acid (5:3 FTCA) | <0.186 | cn | 1.86 | 0.186 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | <0.464 | cn | 1.86 | 0.464 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| MTP | <1.86 | cn | 4.64 | 1.86 | ng/L | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| Isotope Dilution | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| d5-NEtFOSAA | 126 | cn | 37 - 164 | | | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| d3-NMeFOSAA | 106 | cn | 32 - 151 | | | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| 13C3 HFPO-DA | 122 | cn | 20 - 153 | | | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| d7-N-MeFOSE-M | 97 | cn | 10 - 143 | | | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| d9-N-EtFOSE-M | 107 | cn | 10 - 142 | | | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| M2-6:2 FTS | 111 | cn | 29 - 189 | | | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| M2-8:2 FTS | 128 | cn | 34 - 182 | | | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| 13C3 PFBS | 144 | cn | 19 - 178 | | | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| M2-4:2 FTS | 118 | cn | 20 - 187 | | | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| 13C5 PFHxA | 113 | cn | 31 - 142 | | | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| 13C9 PFNA | 111 | cn | 47 - 136 | | | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| 13C6 PFDA | 120 | cn | 47 - 128 | | | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| 13C7 PFUnA | 121 | cn | 40 - 135 | | | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| 13C3 PFHxS | 126 | cn | 32 - 145 | | | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| 13C2-PFDoDA | 112 | cn | 28 - 136 | | | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| d5-NEtPFOSA | 70 | cn | 10 - 108 | | | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| d3-NMePFOSA | 66 | cn | 10 - 107 | | | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| 13C2-2-Perfluorohexylethanoic acid | 183 | *5+ cn | 50 - 150 | | | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| 13C2-2-Perfluoroctylethanoic acid | 172 | *5+ cn | 50 - 150 | | | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| 13C2-2-Perfluorodecylethanoic acid | 149 | cn | 50 - 150 | | | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| 13C2-2H-Perfluoro-2-octenoic acid | 91 | cn | 50 - 150 | | | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| 13C2-2H-Perfluoro-2-decanoic acid | 91 | cn | 50 - 150 | | | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| 13C2-2H-Perfluoro-2-dodecanoic acid | 81 | cn | 50 - 150 | | | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| 13C4 PFBA | 115 | cn | 41 - 132 | | | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| 13C5 PFPeA | 142 | cn | 33 - 155 | | | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| 13C4 PFHpA | 114 | cn | 30 - 144 | | | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| 13C8 PFOA | 116 | cn | 49 - 127 | | | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| 13C8 PFOS | 119 | cn | 49 - 126 | | | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| 13C8 FOSA | 98 | cn | 10 - 143 | | | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |
| 13C2 PFTeDA | 120 | cn | 10 - 144 | | | | 12/13/21 08:36 | 12/15/21 04:01 | 1 |

Client Sample ID: SP-28

Date Collected: 12/09/21 10:14
Date Received: 12/10/21 10:01

Lab Sample ID: 410-66395-5

Matrix: Water

Method: 537 IDA - EPA 537 Isotope Dilution

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|--------|-----------|------|-------|------|---|----------------|----------------|---------|
| NVHOS | <0.195 | cn | 1.95 | 0.195 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Perfluoro (2-ethoxyethane) sulfonic acid | <0.195 | cn | 1.95 | 0.195 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| 1H,1H,2H-Perfluorododecane sulfonic acid (10:2 FTS) | <0.973 | cn | 4.86 | 0.973 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Perfluoro-3-methoxypropanoic acid (PMPA) | <0.195 | cn | 1.95 | 0.195 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |

Client Sample Results

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Client Sample ID: SP-28

Date Collected: 12/09/21 10:14
Date Received: 12/10/21 10:01

Lab Sample ID: 410-66395-5

Matrix: Water

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|--------|-----------|------|-------|------|---|----------------|----------------|---------|
| Hexafluoropropylene Oxide Dimer Acid (HFPO-DA) | <0.486 | cn | 2.92 | 0.486 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Perfluoro-4-ethylcyclohexanesulfonic acid | <0.195 | cn | 1.95 | 0.195 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | <0.195 | cn | 1.95 | 0.195 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Perfluoroctadecanoic acid | <0.973 | cn | 2.92 | 0.973 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| N-ethylperfluoroctane sulfonamidoethanol (NEtFOSE) | <0.973 | cn | 2.92 | 0.973 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Perfluoroctanesulfonic acid | <0.486 | cn | 1.95 | 0.486 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Perfluoroundecanoic acid | <0.486 | cn | 1.95 | 0.486 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| N-methylperfluoroctanesulfonamidoacetic acid (NMeFOSAA) | <0.584 | cn | 1.95 | 0.584 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| R-PSDA | <0.486 | *- *1 cn | 1.95 | 0.486 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Hydrolyzed PSDA | <0.389 | *- *1 cn | 1.95 | 0.389 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| R-PSDCA | <0.195 | cn | 1.95 | 0.195 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| R-EVE | <0.389 | *- cn | 1.95 | 0.389 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| N-methylperfluoroctane sulfonamidoethanol (NMeFOSE) | <0.973 | cn | 2.92 | 0.973 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Perfluoro-2-(perfluoroethoxy)propionic acid | <0.195 | cn | 1.95 | 0.195 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Perfluoropentanoic acid | <0.486 | cn | 1.95 | 0.486 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Perfluoropentanesulfonic acid | <0.486 | cn | 1.95 | 0.486 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| 6:2 Fluorotelomer sulfonic acid | <1.95 | cn | 4.86 | 1.95 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| 8:2 Fluorotelomer carboxylic acid | <0.389 | cn | 1.95 | 0.389 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Nafion Byproduct 1 (Nafion BP1) | <2.92 | *- cn | 9.73 | 2.92 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| N-ethylperfluoroctanesulfonamidoacetic acid (NEtFOSAA) | <0.486 | cn | 2.92 | 0.486 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Perfluorohexanoic acid | <0.486 | cn | 1.95 | 0.486 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Perfluorododecanoic acid | <0.486 | cn | 1.95 | 0.486 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| N-methylperfluoroctane sulfonamide (NMeFOSA) | <0.973 | cn | 2.92 | 0.973 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Perfluoroctanoic acid | <0.486 | cn | 1.95 | 0.486 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Perfluorodecanoic acid | <0.486 | cn | 1.95 | 0.486 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Perfluorodecanesulfonic acid | <0.486 | cn | 1.95 | 0.486 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Perfluorohexanesulfonic acid | <0.486 | cn | 1.95 | 0.486 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| 3-Perfluoropropylpropanoic acid (3:3 FTCA) | <0.292 | cn | 1.95 | 0.292 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Perfluorobutanoic acid | <1.95 | cn | 4.86 | 1.95 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Perfluorobutanesulfonic acid | <0.486 | cn | 1.95 | 0.486 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Perfluoroheptanoic acid | <0.486 | cn | 1.95 | 0.486 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Perfluoroheptanesulfonic acid | <0.486 | cn | 1.95 | 0.486 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Perfluorononanoic acid | <0.486 | cn | 1.95 | 0.486 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Perfluorotetradecanoic acid | <0.486 | cn | 1.95 | 0.486 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | <0.195 | cn | 1.95 | 0.195 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| 8:2 Fluorotelomer sulfonic acid | <0.973 | cn | 2.92 | 0.973 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Perfluoro(3,5-dioxahexanoic) acid (PFO2HxA) | <0.195 | cn | 1.95 | 0.195 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Perfluoro(3,5,7-trioxaoctanoic) acid (PFO3OA) | <0.195 | cn | 1.95 | 0.195 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Perfluoro(3,5,7,9-tetraoxadecanoic) acid (PFO4DA) | <0.292 | cn | 1.95 | 0.292 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |

Client Sample Results

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Client Sample ID: SP-28

Lab Sample ID: 410-66395-5

Matrix: Water

Date Collected: 12/09/21 10:14

Date Received: 12/10/21 10:01

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|-----------|-----------|----------|-------|------|----------------|----------------|----------------|---------|
| Perfluoro-3,5,7,9,11-pentaoxadodecanoic acid | <1.95 | cn | 4.86 | 1.95 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| N-ethylperfluoroctane sulfonamide (NEtFOSA) | <0.973 | cn | 4.86 | 0.973 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Perfluoropropionic Acid (PFPrA) | <1.95 | cn | 4.86 | 1.95 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Perfluoropropanesulfonic acid | <0.195 | cn | 1.95 | 0.195 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| 6:2 Fluorotelomer carboxylic acid | <0.389 | cn | 1.95 | 0.389 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| 10:2 Fluorotelomer carboxylic acid | <0.486 | cn | 1.95 | 0.486 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Perfluoro-2-methoxyacetic acid (PFMOAA) | <0.195 | cn | 1.95 | 0.195 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Perfluorohexadecanoic acid | <0.973 | cn | 2.92 | 0.973 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Perfluorononanesulfonic acid | <0.486 | cn | 1.95 | 0.486 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| EVE Acid | <2.92 | *- cn | 9.73 | 2.92 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| 8:2 Fluorotelomer unsaturated acid | <0.195 | cn | 1.95 | 0.195 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| 6:2 Fluorotelomer unsaturated acid | <0.195 | cn | 1.95 | 0.195 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| 10:2 Fluorotelomer unsaturated acid | <0.195 | cn | 1.95 | 0.195 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Perfluorotridecanoic acid | <0.486 | cn | 1.95 | 0.486 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Hydro-PS Acid | <0.195 | cn | 1.95 | 0.195 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Perfluoroctanesulfonamide | <0.486 | cn | 1.95 | 0.486 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS) | <0.486 | cn | 1.95 | 0.486 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| 4:2 Fluorotelomer sulfonic acid | <0.486 | cn | 1.95 | 0.486 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| 11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS) | <0.486 | cn | 1.95 | 0.486 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Hydro-EVE Acid | <0.195 | cn | 1.95 | 0.195 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Perfluorododecanesulfonic acid | <0.486 | cn | 2.92 | 0.486 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Perfluoro-4-isopropoxybutanoic acid (PFIpOBA) | <0.195 | cn | 1.95 | 0.195 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| 3-Perfluoroheptylpropanoic acid (7:3 FTCA) | <0.292 | *- cn | 1.95 | 0.292 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | <0.195 | cn | 1.95 | 0.195 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| 3-Perfluoropentylpropanoic acid (5:3 FTCA) | <0.195 | cn | 1.95 | 0.195 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | <0.486 | cn | 1.95 | 0.486 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| MTP | <1.95 | cn | 4.86 | 1.95 | ng/L | | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| Isotope Dilution | %Recovery | Qualifier | Limits | | | Prepared | Analyzed | Dil Fac | |
| d5-NEtFOSAA | 118 | cn | 37 - 164 | | | 12/15/21 17:02 | 12/18/21 02:57 | 1 | |
| d3-NMeFOSAA | 110 | cn | 32 - 151 | | | 12/15/21 17:02 | 12/18/21 02:57 | 1 | |
| 13C3 HFPO-DA | 114 | cn | 20 - 153 | | | 12/15/21 17:02 | 12/18/21 02:57 | 1 | |
| d7-N-MeFOSE-M | 92 | cn | 10 - 143 | | | 12/15/21 17:02 | 12/18/21 02:57 | 1 | |
| d9-N-EtFOSE-M | 97 | cn | 10 - 142 | | | 12/15/21 17:02 | 12/18/21 02:57 | 1 | |
| M2-6:2 FTS | 110 | cn | 29 - 189 | | | 12/15/21 17:02 | 12/18/21 02:57 | 1 | |
| M2-8:2 FTS | 120 | cn | 34 - 182 | | | 12/15/21 17:02 | 12/18/21 02:57 | 1 | |
| 13C3 PFBS | 116 | cn | 19 - 178 | | | 12/15/21 17:02 | 12/18/21 02:57 | 1 | |
| M2-4:2 FTS | 112 | cn | 20 - 187 | | | 12/15/21 17:02 | 12/18/21 02:57 | 1 | |
| 13C5 PFHxA | 123 | cn | 31 - 142 | | | 12/15/21 17:02 | 12/18/21 02:57 | 1 | |
| 13C9 PFNA | 129 | cn | 47 - 136 | | | 12/15/21 17:02 | 12/18/21 02:57 | 1 | |
| 13C6 PFDA | 126 | cn | 47 - 128 | | | 12/15/21 17:02 | 12/18/21 02:57 | 1 | |
| 13C7 PFUnA | 123 | cn | 40 - 135 | | | 12/15/21 17:02 | 12/18/21 02:57 | 1 | |
| 13C3 PFHxS | 127 | cn | 32 - 145 | | | 12/15/21 17:02 | 12/18/21 02:57 | 1 | |

Eurofins Lancaster Laboratories Env, LLC

Client Sample Results

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Client Sample ID: SP-28

Date Collected: 12/09/21 10:14
Date Received: 12/10/21 10:01

Lab Sample ID: 410-66395-5

Matrix: Water

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

| Isotope Dilution | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|-------------------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 13C2-PFDoDA | 112 | cn | 28 - 136 | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| d5-NEtPFOSA | 79 | cn | 10 - 108 | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| d3-NMePFOSA | 78 | cn | 10 - 107 | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| 13C2-2-Perfluorohexylethanoic acid | 148 | cn | 50 - 150 | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| 13C2-2-Perfluoroctylethanoic acid | 137 | cn | 50 - 150 | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| 13C2-2-Perfluorodecylethanoic acid | 111 | cn | 50 - 150 | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| 13C2-2H-Perfluoro-2-octenoic acid | 130 | cn | 50 - 150 | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| 13C2-2H-Perfluoro-2-decanoic acid | 128 | cn | 50 - 150 | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| 13C2-2H-Perfluoro-2-dodecanoic acid | 114 | cn | 50 - 150 | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| 13C4 PFBA | 122 | cn | 41 - 132 | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| 13C5 PFPeA | 121 | cn | 33 - 155 | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| 13C4 PFHpA | 127 | cn | 30 - 144 | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| 13C8 PFOA | 122 | cn | 49 - 127 | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| 13C8 PFOS | 124 | cn | 49 - 126 | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| 13C8 FOSA | 99 | cn | 10 - 143 | 12/15/21 17:02 | 12/18/21 02:57 | 1 |
| 13C2 PFTeDA | 106 | cn | 10 - 144 | 12/15/21 17:02 | 12/18/21 02:57 | 1 |

Client Sample ID: SP-29

Date Collected: 12/09/21 10:43
Date Received: 12/10/21 10:01

Lab Sample ID: 410-66395-6

Matrix: Water

Method: 537 IDA - EPA 537 Isotope Dilution

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|--------------|-------------|------|-------|------|---|----------------|----------------|---------|
| NVHOS | <0.185 | cn | 1.85 | 0.185 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| Perfluoro (2-ethoxyethane) sulfonic acid | <0.185 | cn | 1.85 | 0.185 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| 1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS) | <0.927 | cn | 4.63 | 0.927 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| Perfluoro-3-methoxypropanoic acid (PMPA) | 13.1 | cn | 1.85 | 0.185 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| Hexafluoropropylene Oxide Dimer Acid (HFPO-DA) | 9.09 | cn | 2.78 | 0.463 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| Perfluoro-4-ethylcyclohexanesulfonic acid | <0.185 | cn | 1.85 | 0.185 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | <0.185 | cn | 1.85 | 0.185 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| Perfluoroctadecanoic acid | <0.927 | cn | 2.78 | 0.927 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| N-ethylperfluoroctane sulfonamidoethanol (N _{Et} FOSE) | <0.927 | cn | 2.78 | 0.927 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| Perfluoroctanesulfonic acid | 0.741 | J cn | 1.85 | 0.463 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| Perfluoroundecanoic acid | <0.463 | cn | 1.85 | 0.463 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| N-methylperfluoroctanesulfonamidoacetic acid (NMeFOSAA) | <0.556 | cn | 1.85 | 0.556 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| R-PSDA | <0.463 | *-*1 cn | 1.85 | 0.463 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| Hydrolyzed PSDA | <0.371 | *-*1 cn | 1.85 | 0.371 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| R-PSDCA | <0.185 | cn | 1.85 | 0.185 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| R-EVE | <0.371 | *- cn | 1.85 | 0.371 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| N-methylperfluoroctane sulfonamidoethanol (NMeFOSE) | <0.927 | cn | 2.78 | 0.927 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| Perfluoro-2-(perfluoroethoxy)propionic acid | 5.46 | cn | 1.85 | 0.185 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| Perfluoropentanoic acid | 43.5 | cn | 1.85 | 0.463 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |

Eurofins Lancaster Laboratories Env, LLC

Client Sample Results

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Client Sample ID: SP-29

Lab Sample ID: 410-66395-6

Matrix: Water

Date Collected: 12/09/21 10:43

Date Received: 12/10/21 10:01

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--|--------------|---------------|------|-------|------|---|----------------|----------------|---------|
| Perfluoropentanesulfonic acid | <0.463 | cn | 1.85 | 0.463 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| 6:2 Fluorotelomer sulfonic acid | <1.85 | cn | 4.63 | 1.85 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| 8:2 Fluorotelomer carboxylic acid | <0.371 | cn | 1.85 | 0.371 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| Nafion Byproduct 1 (Nafion BP1) | <2.78 | *- cn | 9.27 | 2.78 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| N-ethylperfluoroctanesulfonamidoacetic acid (NEtFOSAA) | <0.463 | cn | 2.78 | 0.463 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| Perfluorohexanoic acid | 5.00 | I cn | 1.85 | 0.463 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| Perfluorododecanoic acid | <0.463 | cn | 1.85 | 0.463 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| N-methylperfluoroctane sulfonamide (NMeFOSA) | <0.927 | cn | 2.78 | 0.927 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| Perfluoroctanoic acid | 1.07 | J cn | 1.85 | 0.463 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| Perfluorodecanoic acid | <0.463 | cn | 1.85 | 0.463 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| Perfluorodecanesulfonic acid | <0.463 | cn | 1.85 | 0.463 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| Perfluorohexanesulfonic acid | 0.665 | J cn | 1.85 | 0.463 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| 3-Perfluoropropylpropanoic acid (3:3 FTCA) | <0.278 | cn | 1.85 | 0.278 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| Perfluorobutanesulfonic acid | 8.21 | cn | 1.85 | 0.463 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| Perfluoroheptanoic acid | 1.43 | J I cn | 1.85 | 0.463 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| Perfluoroheptanesulfonic acid | <0.463 | cn | 1.85 | 0.463 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| Perfluorononanoic acid | <0.463 | cn | 1.85 | 0.463 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| Perfluorotetradecanoic acid | <0.463 | cn | 1.85 | 0.463 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | 36.0 | cn | 1.85 | 0.185 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| 8:2 Fluorotelomer sulfonic acid | <0.927 | cn | 2.78 | 0.927 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| Perfluoro(3,5-dioxahexanoic) acid (PFO2HxA) | <0.185 | cn | 1.85 | 0.185 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| Perfluoro(3,5,7-trioxaoctanoic) acid (PFO3OA) | <0.185 | cn | 1.85 | 0.185 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| Perfluoro(3,5,7,9-tetraoxadecanoic) acid (PFO4DA) | <0.278 | cn | 1.85 | 0.278 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| Perfluoro-3,5,7,9,11-pentaoxadodecanoic acid | <1.85 | cn | 4.63 | 1.85 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| N-ethylperfluoroctane sulfonamide (NEtFOSA) | <0.927 | cn | 4.63 | 0.927 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| Perfluoropropanesulfonic acid | 3.09 | cn | 1.85 | 0.185 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| 6:2 Fluorotelomer carboxylic acid | <0.371 | cn | 1.85 | 0.371 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| 10:2 Fluorotelomer carboxylic acid | <0.463 | cn | 1.85 | 0.463 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| Perfluoro-2-methoxyacetic acid (PFMOAA) | 4.26 | cn | 1.85 | 0.185 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| Perfluorohexadecanoic acid | <0.927 | cn | 2.78 | 0.927 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| Perfluorononanesulfonic acid | <0.463 | cn | 1.85 | 0.463 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| EVE Acid | <2.78 | *- cn | 9.27 | 2.78 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| 8:2 Fluorotelomer unsaturated acid | <0.185 | cn | 1.85 | 0.185 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| 6:2 Fluorotelomer unsaturated acid | <0.185 | cn | 1.85 | 0.185 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| 10:2 Fluorotelomer unsaturated acid | <0.185 | cn | 1.85 | 0.185 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| Perfluorotridecanoic acid | <0.463 | cn | 1.85 | 0.463 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| Hydro-PS Acid | <0.185 | cn | 1.85 | 0.185 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| Perfluoroctanesulfonamide | <0.463 | cn | 1.85 | 0.463 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| 9-Chlorohexadecafluoro-3-oxanonaneno-1-sulfonic acid(9Cl-PF3ONS) | <0.463 | cn | 1.85 | 0.463 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| 4:2 Fluorotelomer sulfonic acid | <0.463 | cn | 1.85 | 0.463 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |

Client Sample Results

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Client Sample ID: SP-29

Lab Sample ID: 410-66395-6

Matrix: Water

Date Collected: 12/09/21 10:43

Date Received: 12/10/21 10:01

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--|--------------|-------------|----------|-------|------|---|----------------|----------------|---------|
| 11-Chloroeicosfluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS) | <0.463 | cn | 1.85 | 0.463 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| Hydro-EVE Acid | <0.185 | cn | 1.85 | 0.185 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| Perfluorododecanesulfonic acid | <0.463 | cn | 2.78 | 0.463 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| Perfluoro-4-isopropoxybutanoic acid (PFIpOBA) | 0.635 | J cn | 1.85 | 0.185 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| 3-Perfluorohexylpropanoic acid (7:3 FTCA) | <0.278 | *- cn | 1.85 | 0.278 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | 30.4 | cn | 1.85 | 0.185 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| 3-Perfluoropentylpropanoic acid (5:3 FTCA) | <0.185 | cn | 1.85 | 0.185 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | <0.463 | cn | 1.85 | 0.463 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| MTP | <1.85 | cn | 4.63 | 1.85 | ng/L | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| Isotope Dilution | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| d5-NEtFOSAA | 120 | cn | 37 - 164 | | | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| d3-NMeFOSAA | 110 | cn | 32 - 151 | | | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| 13C3 HFPO-DA | 113 | cn | 20 - 153 | | | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| d7-N-MeFOSE-M | 87 | cn | 10 - 143 | | | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| d9-N-EtFOSE-M | 93 | cn | 10 - 142 | | | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| M2-6:2 FTS | 112 | cn | 29 - 189 | | | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| M2-8:2 FTS | 123 | cn | 34 - 182 | | | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| 13C3 PFBS | 192 | *5+ cn | 19 - 178 | | | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| M2-4:2 FTS | 115 | cn | 20 - 187 | | | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| 13C5 PFHxA | 123 | cn | 31 - 142 | | | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| 13C9 PFNA | 128 | cn | 47 - 136 | | | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| 13C6 PFDA | 128 | cn | 47 - 128 | | | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| 13C7 PFUnA | 119 | cn | 40 - 135 | | | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| 13C3 PFHxS | 124 | cn | 32 - 145 | | | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| 13C2-PFDODA | 117 | cn | 28 - 136 | | | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| d5-NEtPFOSA | 84 | cn | 10 - 108 | | | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| d3-NMePFOSA | 87 | cn | 10 - 107 | | | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| 13C2-2-Perfluorohexylethanoic acid | 150 | cn | 50 - 150 | | | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| 13C2-2-Perfluorooctylethanoic acid | 136 | cn | 50 - 150 | | | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| 13C2-2-Perfluorododecylethanoic acid | 120 | cn | 50 - 150 | | | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| 13C2-2H-Perfluoro-2-octenoic acid | 127 | cn | 50 - 150 | | | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| 13C2-2H-Perfluoro-2-decanoic acid | 129 | cn | 50 - 150 | | | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| 13C2-2H-Perfluoro-2-dodecanoic acid | 120 | cn | 50 - 150 | | | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| 13C4 PFBA | 126 | cn | 41 - 132 | | | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| 13C5 PFPeA | 178 | *5+ cn | 33 - 155 | | | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| 13C4 PFHpA | 121 | cn | 30 - 144 | | | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| 13C8 PFOA | 124 | cn | 49 - 127 | | | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| 13C8 PFOS | 123 | cn | 49 - 126 | | | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| 13C8 FOSA | 121 | cn | 10 - 143 | | | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |
| 13C2 PFTeDA | 105 | cn | 10 - 144 | | | | 12/15/21 17:02 | 12/18/21 03:08 | 1 |

Method: 537 IDA - EPA 537 Isotope Dilution - DL

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|------------------------|--------|-----------|------|------|------|---|----------------|----------------|---------|
| Perfluorobutanoic acid | 1160 | cn | 46.3 | 18.5 | ng/L | | 12/15/21 17:02 | 12/18/21 03:19 | 10 |

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Client Sample Results

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Client Sample ID: SP-29

Lab Sample ID: 410-66395-6

Date Collected: 12/09/21 10:43
Date Received: 12/10/21 10:01

Matrix: Water

Method: 537 IDA - EPA 537 Isotope Dilution - DL (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------------------------------|-----------|-----------|----------|------|------|---|----------------|----------------|---------|
| Perfluoropropionic Acid (PFPrA) | 1990 | cn | 46.3 | 18.5 | ng/L | | 12/15/21 17:02 | 12/18/21 03:19 | 10 |
| Isotope Dilution | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 13C4 PFBA | 120 | cn | 41 - 132 | | | | 12/15/21 17:02 | 12/18/21 03:19 | 10 |

Isotope Dilution Summary

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Method: 537 IDA - EPA 537 Isotope Dilution

Matrix: Water

Prep Type: Total/NA

| Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | | | |
|---|------------------------|---------------------|---------------------|--------------------|--------------------|---------------------|---------------------|---------------------|--------------------|
| Lab Sample ID | Client Sample ID | d5NEFOS (37-164) | d3NMFOS (32-151) | HFPODA (20-153) | NMFN (10-143) | NEFM (10-142) | M262FTS (29-189) | M282FTS (34-182) | C3PFBS (19-178) |
| 410-66395-1 | SP-21 | 104 cn | 96 cn | 114 cn | 60 cn | 62 cn | 97 cn | 115 cn | 141 cn |
| 410-66395-1 - DL | SP-21 | | | | | | | | |
| 410-66395-2 | SP-24 | 137 cn | 119 cn | 131 cn | 84 cn | 93 cn | 84 cn | 96 cn | 240 *5+ cn |
| 410-66395-2 - DL | SP-24 | | | | | | | | |
| 410-66395-2 - DL2 | SP-24 | | | | | | | | |
| 410-66395-3 | Trip Blank | 116 cn | 97 cn | 116 cn | 79 cn | 83 cn | 101 cn | 114 cn | 114 cn |
| 410-66395-4 | SP-27 | 126 cn | 106 cn | 122 cn | 97 cn | 107 cn | 111 cn | 128 cn | 144 cn |
| 410-66395-5 | SP-28 | 118 cn | 110 cn | 114 cn | 92 cn | 97 cn | 110 cn | 120 cn | 116 cn |
| 410-66395-6 | SP-29 | 120 cn | 110 cn | 113 cn | 87 cn | 93 cn | 112 cn | 123 cn | 192 *5+ cn |
| 410-66395-6 - DL | SP-29 | | | | | | | | |
| LCS 410-204503/2-A | Lab Control Sample | 122 | 106 | 108 | 102 | 113 | 100 | 114 | 121 |
| LCS 410-205834/2-A | Lab Control Sample | 118 | 118 | 128 | 101 | 109 | 113 | 135 | 142 |
| LCSD 410-204503/3-A | Lab Control Sample Dup | 136 | 118 | 125 | 112 | 120 | 107 | 135 | 129 |
| LCSD 410-205834/3-A | Lab Control Sample Dup | 145 | 138 | 149 | 114 | 119 | 120 | 142 | 143 |
| MB 410-204503/1-A | Method Blank | 139 | 115 | 139 | 116 | 125 | 110 | 128 | 133 |
| MB 410-205834/1-A | Method Blank | 144 | 128 | 154 *5+ | 109 | 114 | 131 | 152 | 150 |
| Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | | | |
| Lab Sample ID | Client Sample ID | M242FTS (20-187) | 13C5PHA (31-142) | C9PFNA (47-136) | C6PFDA (47-128) | 13C7PUA (40-135) | C3PFHS (32-145) | PFDoDA (28-136) | d5NPFA (10-108) |
| 410-66395-1 | SP-21 | 117 cn | 107 cn | 105 cn | 108 cn | 105 cn | 115 cn | 91 cn | 4 *5- cn |
| 410-66395-1 - DL | SP-21 | | | | | | | | |
| 410-66395-2 | SP-24 | 115 cn | 114 cn | 107 cn | 101 cn | 125 cn | 101 cn | 106 cn | 69 cn |
| 410-66395-2 - DL | SP-24 | | | | | | 111 cn | | |
| 410-66395-2 - DL2 | SP-24 | | | | | | | | |
| 410-66395-3 | Trip Blank | 108 cn | 113 cn | 104 cn | 109 cn | 109 cn | 118 cn | 105 cn | 59 cn |
| 410-66395-4 | SP-27 | 118 cn | 113 cn | 111 cn | 120 cn | 121 cn | 126 cn | 112 cn | 70 cn |
| 410-66395-5 | SP-28 | 112 cn | 123 cn | 129 cn | 126 cn | 123 cn | 127 cn | 112 cn | 79 cn |
| 410-66395-6 | SP-29 | 115 cn | 123 cn | 128 cn | 128 cn | 119 cn | 124 cn | 117 cn | 84 cn |
| 410-66395-6 - DL | SP-29 | | | | | | | | |
| LCS 410-204503/2-A | Lab Control Sample | 102 | 103 | 105 | 112 | 115 | 118 | 108 | 93 |
| LCS 410-205834/2-A | Lab Control Sample | 121 | 129 | 143 *5+ | 133 *5+ | 127 | 139 | 124 | 98 |
| LCSD 410-204503/3-A | Lab Control Sample Dup | 114 | 118 | 117 | 119 | 123 | 129 | 120 | 102 |
| LCSD 410-205834/3-A | Lab Control Sample Dup | 128 | 139 | 134 | 144 *5+ | 153 *5+ | 139 | 144 *5+ | 102 |
| MB 410-204503/1-A | Method Blank | 124 | 121 | 119 | 123 | 130 | 138 | 119 | 107 |
| MB 410-205834/1-A | Method Blank | 150 | 148 *5+ | 145 *5+ | 149 *5+ | 139 *5+ | 153 *5+ | 147 *5+ | 110 *5+ |
| Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | | | |
| Lab Sample ID | Client Sample ID | d3NMFSA (10-107) | MFHEA (50-150) | MFOEA (50-150) | MFDEA (50-150) | MFHUEA (50-150) | MFOUEA (50-150) | MFDEUA (50-150) | PFBA (41-132) |
| 410-66395-1 | SP-21 | 5 *5- cn | 162 *5+ cn | 165 *5+ cn | 146 cn | 83 cn | 81 cn | 73 cn | 108 cn |
| 410-66395-1 - DL | SP-21 | | | | | | | | |
| 410-66395-2 | SP-24 | 80 cn | 180 *5+ cn | 160 *5+ cn | 186 *5+ cn | 92 cn | 83 cn | 95 cn | 103 cn |
| 410-66395-2 - DL | SP-24 | | | | | | | | |
| 410-66395-2 - DL2 | SP-24 | | | | | | | | |
| 410-66395-3 | Trip Blank | 58 cn | 169 *5+ cn | 147 cn | 145 cn | 87 cn | 77 cn | 80 cn | 106 cn |

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Isotope Dilution Summary

Client: Eastern Research Group, Inc.

Job ID: 410-66395-1

Project/Site: Groundwater PFAS-T02

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Matrix: Water

Prep Type: Total/NA

| Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | | | |
|---|------------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|------------------|
| Lab Sample ID | Client Sample ID | d3NMFSAs | MFHEA (50-150) | MFOEA (50-150) | MFDEA (50-150) | MFHUEA (50-150) | MFOUEA (50-150) | MFDUEA (50-150) | PFBA (41-132) |
| 410-66395-4 | SP-27 | 66 cn | 183 *5+ | 172 *5+ | 149 cn | 91 cn | 91 cn | 81 cn | 115 cn |
| 410-66395-5 | SP-28 | 78 cn | 148 cn | 137 cn | 111 cn | 130 cn | 128 cn | 114 cn | 122 cn |
| 410-66395-6 | SP-29 | 87 cn | 150 cn | 136 cn | 120 cn | 127 cn | 129 cn | 120 cn | 126 cn |
| 410-66395-6 - DL | SP-29 | | | | | | | | 120 cn |
| LCS 410-204503/2-A | Lab Control Sample | 86 | 164 *5+ | 159 *5+ | 154 *5+ | 82 | 83 | 87 | 112 |
| LCS 410-205834/2-A | Lab Control Sample | 98 | 157 *5+ | 137 | 121 | 138 | 129 | 118 | 130 |
| LCSD 410-204503/3-A | Lab Control Sample Dup | 96 | 179 *5+ | 186 *5+ | 170 *5+ | 91 | 94 | 94 | 117 |
| LCSD 410-205834/3-A | Lab Control Sample Dup | 103 | 158 *5+ | 157 *5+ | 140 | 144 | 144 | 135 | 134 *5+ |
| MB 410-204503/1-A | Method Blank | 105 | 207 *5+ | 192 *5+ | 175 *5+ | 102 | 96 | 95 | 127 |
| MB 410-205834/1-A | Method Blank | 98 | 169 *5+ | 152 *5+ | 142 | 150 | 133 | 134 | 141 *5+ |
| Percent Isotope Dilution Recovery (Acceptance Limits) | | | | | | | | | |
| Lab Sample ID | Client Sample ID | PFPeA (33-155) | C4PFHA (30-144) | C8PFOA (49-127) | C8PFOS (49-126) | PFOSA (10-143) | PFTDA (10-144) | | |
| 410-66395-1 | SP-21 | 133 cn | 107 cn | 107 cn | 104 cn | 104 cn | 87 cn | | |
| 410-66395-1 - DL | SP-21 | | | | | | | | |
| 410-66395-2 | SP-24 | 170 *5+ cn | 85 cn | 95 cn | 134 *5+ cn | 139 cn | 94 cn | | |
| 410-66395-2 - DL | SP-24 | 124 cn | | 98 cn | | | | | |
| 410-66395-2 - DL2 | SP-24 | | | | | | | | |
| 410-66395-3 | Trip Blank | 117 cn | 108 cn | 105 cn | 110 cn | 92 cn | 106 cn | | |
| 410-66395-4 | SP-27 | 142 cn | 114 cn | 116 cn | 119 cn | 98 cn | 120 cn | | |
| 410-66395-5 | SP-28 | 121 cn | 127 cn | 122 cn | 124 cn | 99 cn | 106 cn | | |
| 410-66395-6 | SP-29 | 178 *5+ cn | 121 cn | 124 cn | 123 cn | 121 cn | 105 cn | | |
| 410-66395-6 - DL | SP-29 | | | | | | | | |
| LCS 410-204503/2-A | Lab Control Sample | 119 | 108 | 108 | 112 | 99 | 113 | | |
| LCS 410-205834/2-A | Lab Control Sample | 139 | 137 | 139 *5+ | 132 *5+ | 116 | 118 | | |
| LCSD 410-204503/3-A | Lab Control Sample Dup | 120 | 115 | 117 | 120 | 108 | 127 | | |
| LCSD 410-205834/3-A | Lab Control Sample Dup | 148 | 136 | 135 *5+ | 130 *5+ | 120 | 133 | | |
| MB 410-204503/1-A | Method Blank | 133 | 127 | 127 | 124 | 113 | 132 | | |
| MB 410-205834/1-A | Method Blank | 149 | 152 *5+ | 145 *5+ | 144 *5+ | 127 | 128 | | |

Surrogate Legend

d5NEFOS = d5-NEtFOSAA

d3NMFS = d3-NMeFOSAA

HFPODA = 13C3 HFPO-DA

NMFM = d7-N-MeFOSE-M

NEFM = d9-N-EtFOSE-M

M262FTS = M2-6:2 FTS

M282FTS = M2-8:2 FTS

C3PFBS = 13C3 PFBS

M242FTS = M2-4:2 FTS

13C5PHA = 13C5 PFHxA

C9PFNA = 13C9 PFNA

C6PFDA = 13C6 PFDA

13C7PUA = 13C7 PFUnA

C3PFHS = 13C3 PFHxS

PFDoDA = 13C2-PFDoDA

d5NPFA = d5-NEtPFOSA

d3NMFS = d3-NMePFOSA

Isotope Dilution Summary

Client: Eastern Research Group, Inc.

Job ID: 410-66395-1

Project/Site: Groundwater PFAS-TO2

MFHEA = 13C2-2-Perfluorohexylethanoic acid
MFOEA = 13C2-2-Perfluorooctylethanoic acid
MFDEA = 13C2-2-Perfluorodecylethanoic acid
MFHUEA = 13C2-2H-Perfluoro-2-octenoic acid
MFOUEA = 13C2-2H-Perfluoro-2-decanoic acid
MFDUEA = 13C2-2H-Perfluoro-2-dodecanoic acid
PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
C4PFHA = 13C4 PFHpA
C8PFOA = 13C8 PFOA
C8PFOS = 13C8 PFOS
PFOSA = 13C8 FOSA
PFTDA = 13C2 PFTeDA

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QC Sample Results

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Method: 537 IDA - EPA 537 Isotope Dilution

Lab Sample ID: MB 410-204503/1-A

Matrix: Water

Analysis Batch: 205207

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 204503

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|--------------|-----------------|------|-------|------|---|----------------|----------------|---------|
| NVHOS | <0.200 | | 2.00 | 0.200 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Perfluoro (2-ethoxyethane) sulfonic acid | <0.200 | | 2.00 | 0.200 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| 1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS) | <1.00 | | 5.00 | 1.00 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Perfluoro-3-methoxypropanoic acid (PMPA) | <0.200 | | 2.00 | 0.200 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Hexafluoropropylene Oxide Dimer Acid (HFPO-DA) | <0.500 | | 3.00 | 0.500 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Perfluoro-4-ethylcyclohexanesulfonic acid | <0.200 | | 2.00 | 0.200 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | <0.200 | | 2.00 | 0.200 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Perfluoroctadecanoic acid | <1.00 | | 3.00 | 1.00 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| N-ethylperfluooctane sulfonamidoethanol (NEtFOSE) | <1.00 | | 3.00 | 1.00 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Perfluoroctanesulfonic acid | 0.6397 J | | 2.00 | 0.500 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Perfluoroundecanoic acid | <0.500 | | 2.00 | 0.500 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| N-methylperfluoroctanesulfonamidoacetic acid (NMeFOSAA) | <0.600 | | 2.00 | 0.600 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| R-PSDA | <0.500 | | 2.00 | 0.500 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Hydrolyzed PSDA | <0.400 | | 2.00 | 0.400 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| R-PSDCA | <0.200 | | 2.00 | 0.200 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| R-EVE | <0.400 | | 2.00 | 0.400 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| N-methylperfluoroctane sulfonamidoethanol (NMeFOSE) | <1.00 | | 3.00 | 1.00 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Perfluoro-2-(perfluoroethoxy)propionic acid | <0.200 | | 2.00 | 0.200 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Perfluoropentanoic acid | <0.500 | | 2.00 | 0.500 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Perfluoropentanesulfonic acid | <0.500 | | 2.00 | 0.500 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| 6:2 Fluorotelomer sulfonic acid | <2.00 | | 5.00 | 2.00 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| 8:2 Fluorotelomer carboxylic acid | <0.400 | | 2.00 | 0.400 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Nafion Byproduct 1 (Nafion BP1) | <3.00 | | 10.0 | 3.00 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| N-ethylperfluoroctanesulfonamidoacetic acid (NMeFOSAA) | 0.9076 J | | 3.00 | 0.500 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Perfluoroheanoic acid | <0.500 | | 2.00 | 0.500 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Perfluorododecanoic acid | <0.500 | | 2.00 | 0.500 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| N-methylperfluoroctane sulfonamide (NMeFOSA) | <1.00 | | 3.00 | 1.00 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Perfluoroctanoic acid | <0.500 | | 2.00 | 0.500 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Perfluorodecanoic acid | <0.500 | | 2.00 | 0.500 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Perfluorodecanesulfonic acid | <0.500 | | 2.00 | 0.500 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Perfluorohexanesulfonic acid | <0.500 | | 2.00 | 0.500 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| 3-Perfluoropropylpropanoic acid (3:3 FTCA) | <0.300 | | 2.00 | 0.300 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Perfluorobutanoic acid | <2.00 | | 5.00 | 2.00 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Perfluorobutanesulfonic acid | <0.500 | | 2.00 | 0.500 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Perfluoroheptanoic acid | <0.500 | | 2.00 | 0.500 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Perfluoroheptanesulfonic acid | <0.500 | | 2.00 | 0.500 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Perfluorononanoic acid | <0.500 | | 2.00 | 0.500 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Perfluorotetradecanoic acid | <0.500 | | 2.00 | 0.500 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |

QC Sample Results

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: MB 410-204503/1-A

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 205207

Prep Batch: 204503

| Analyte | MB | MB | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--|----------|-----------|------|-------|------|---|----------------|----------------|---------|
| | Result | Qualifier | | | | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | <0.200 | | 2.00 | 0.200 | ng/L | | | | |
| 8:2 Fluorotelomer sulfonic acid | <1.00 | | 3.00 | 1.00 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Perfluoro(3,5-dioxahexanoic) acid (PFO2HxA) | <0.200 | | 2.00 | 0.200 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Perfluoro(3,5,7-trioxaoctanoic) acid (PFO3OA) | <0.200 | | 2.00 | 0.200 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Perfluoro(3,5,7,9-tetraoxadecanoic) acid (PFO4DA) | <0.300 | | 2.00 | 0.300 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Perfluoro-3,5,7,9,11-pentaoxadodecanoic acid | <2.00 | | 5.00 | 2.00 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| N-ethylperfluoroctane sulfonamide (NETFOSA) | <1.00 | | 5.00 | 1.00 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Perfluoropropionic Acid (PPFA) | <2.00 | | 5.00 | 2.00 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Perfluoropropanesulfonic acid | <0.200 | | 2.00 | 0.200 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| 6:2 Fluorotelomer carboxylic acid | <0.400 | | 2.00 | 0.400 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| 10:2 Fluorotelomer carboxylic acid | <0.500 | | 2.00 | 0.500 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Perfluoro-2-methoxyacetic acid (PFMOAA) | <0.200 | | 2.00 | 0.200 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Perfluorohexadecanoic acid | <1.00 | | 3.00 | 1.00 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Perfluorononanesulfonic acid | <0.500 | | 2.00 | 0.500 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| EVE Acid | <3.00 | | 10.0 | 3.00 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| 8:2 Fluorotelomer unsaturated acid | 0.4899 J | | 2.00 | 0.200 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| 6:2 Fluorotelomer unsaturated acid | <0.200 | | 2.00 | 0.200 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| 10:2 Fluorotelomer unsaturated acid | 0.6815 J | | 2.00 | 0.200 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Perfluorotridecanoic acid | <0.500 | | 2.00 | 0.500 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Hydro-PS Acid | <0.200 | | 2.00 | 0.200 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Perfluoroctanesulfonamide | <0.500 | | 2.00 | 0.500 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| 9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS) | <0.500 | | 2.00 | 0.500 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| 4:2 Fluorotelomer sulfonic acid | <0.500 | | 2.00 | 0.500 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| 11-Chloroeicosfluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS) | <0.500 | | 2.00 | 0.500 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Hydro-EVE Acid | <0.200 | | 2.00 | 0.200 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Perfluorododecanesulfonic acid | <0.500 | | 3.00 | 0.500 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Perfluoro-4-isopropoxybutanoic acid (PFIpOBA) | <0.200 | | 2.00 | 0.200 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| 3-Perfluoroheptylpropanoic acid (7:3 FTCA) | 0.5463 J | | 2.00 | 0.300 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | <0.200 | | 2.00 | 0.200 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| 3-Perfluoropentylpropanoic acid (5:3 FTCA) | 0.4168 J | | 2.00 | 0.200 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | <0.500 | | 2.00 | 0.500 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| MTP | <2.00 | | 5.00 | 2.00 | ng/L | | 12/13/21 08:36 | 12/15/21 01:26 | 1 |

| Isotope Dilution | MB | MB | Limits | Prepared | Analyzed | Dil Fac |
|------------------|-----------|-----------|----------|----------------|----------------|---------|
| | %Recovery | Qualifier | | | | |
| d5-NETFOSAA | 139 | | 37 - 164 | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| d3-NMeFOSAA | 115 | | 32 - 151 | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| 13C3 HFPO-DA | 139 | | 20 - 153 | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| d7-N-MeFOSE-M | 116 | | 10 - 143 | 12/13/21 08:36 | 12/15/21 01:26 | 1 |

QC Sample Results

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: MB 410-204503/1-A

Matrix: Water

Analysis Batch: 205207

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 204503

| <i>Isotope Dilution</i> | <i>MB</i> | <i>MB</i> | <i>%Recovery</i> | <i>Qualifier</i> | <i>Limits</i> | <i>Prepared</i> | <i>Analyzed</i> | <i>Dil Fac</i> |
|-------------------------------------|-----------|-----------|------------------|------------------|---------------|-----------------|-----------------|----------------|
| d9-N-EtFOSE-M | | 125 | | | 10 - 142 | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| M2-6:2 FTS | | 110 | | | 29 - 189 | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| M2-8:2 FTS | | 128 | | | 34 - 182 | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| 13C3 PFBS | | 133 | | | 19 - 178 | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| M2-4:2 FTS | | 124 | | | 20 - 187 | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| 13C5 PFHxA | | 121 | | | 31 - 142 | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| 13C9 PFNA | | 119 | | | 47 - 136 | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| 13C6 PFDA | | 123 | | | 47 - 128 | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| 13C7 PFUnA | | 130 | | | 40 - 135 | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| 13C3 PFHxS | | 138 | | | 32 - 145 | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| 13C2-PFDoDA | | 119 | | | 28 - 136 | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| d5-NEtPFOSA | | 107 | | | 10 - 108 | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| d3-NMePFOSA | | 105 | | | 10 - 107 | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| 13C2-2-Perfluorohexylethanoic acid | | 207 | *5+ | | 50 - 150 | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| 13C2-2-Perfluoroctylethanoic acid | | 192 | *5+ | | 50 - 150 | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| 13C2-2-Perfluorodecylethanoic acid | | 175 | *5+ | | 50 - 150 | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| 13C2-2H-Perfluoro-2-octenoic acid | | 102 | | | 50 - 150 | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| 13C2-2H-Perfluoro-2-decanoic acid | | 96 | | | 50 - 150 | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| 13C2-2H-Perfluoro-2-dodecanoic acid | | 95 | | | 50 - 150 | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| 13C4 PFBA | | 127 | | | 41 - 132 | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| 13C5 PFPeA | | 133 | | | 33 - 155 | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| 13C4 PFHpA | | 127 | | | 30 - 144 | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| 13C8 PFOA | | 127 | | | 49 - 127 | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| 13C8 PFOS | | 124 | | | 49 - 126 | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| 13C8 FOSA | | 113 | | | 10 - 143 | 12/13/21 08:36 | 12/15/21 01:26 | 1 |
| 13C2 PFTeDA | | 132 | | | 10 - 144 | 12/13/21 08:36 | 12/15/21 01:26 | 1 |

Lab Sample ID: LCS 410-204503/2-A

Matrix: Water

Analysis Batch: 205207

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 204503

| <i>Analyte</i> | <i>Spike Added</i> | <i>LCS Result</i> | <i>LCS Qualifier</i> | <i>Unit</i> | <i>D</i> | <i>%Rec</i> | <i>%Rec.</i> | <i>Limits</i> |
|--|--------------------|-------------------|----------------------|-------------|----------|-------------|--------------|---------------|
| NVHOS | 25.6 | 18.73 | | ng/L | | 73 | 70 - 130 | |
| Perfluoro (2-ethoxyethane)sulfonic acid | 22.8 | 20.45 | | ng/L | | 90 | 70 - 130 | |
| 1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS) | 24.7 | 20.82 | | ng/L | | 84 | 44 - 141 | |
| Perfluoro-3-methoxypropanoic acid (PMPA) | 25.6 | 19.89 | | ng/L | | 78 | 70 - 130 | |
| Hexafluoropropylene Oxide Dimer Acid (HFPO-DA) | 25.6 | 19.36 | | ng/L | | 76 | 37 - 147 | |
| Perfluoro-4-ethylcyclohexanesulfonic acid | 23.6 | 25.37 | | ng/L | | 108 | 70 - 130 | |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | 25.6 | 24.39 | | ng/L | | 95 | 70 - 130 | |
| Perfluoroctadecanoic acid | 25.6 | 22.85 | | ng/L | | 89 | 32 - 167 | |
| N-ethylperfluoroctane sulfonamidoethanol (NEtFOSE) | 25.6 | 19.95 | | ng/L | | 78 | 49 - 128 | |
| Perfluoroctanesulfonic acid | 23.7 | 20.10 | | ng/L | | 85 | 51 - 126 | |
| Perfluoroundecanoic acid | 25.6 | 20.29 | | ng/L | | 79 | 62 - 138 | |

Eurofins Lancaster Laboratories Env, LLC

QC Sample Results

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCS 410-204503/2-A

Matrix: Water

Analysis Batch: 205207

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 204503

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|--|----------------|---------------|------------------|------|-----|----------|--------|
| N-methylperfluorooctanesulfona midoacetic acid (NMeFOSAA) | 25.6 | 19.46 | | ng/L | 76 | 58 - 143 | |
| R-PSDA | 25.6 | 16.47 | *- | ng/L | 64 | 70 - 130 | |
| Hydrolyzed PSDA | 25.6 | 18.25 | | ng/L | 71 | 70 - 130 | |
| R-PSDCA | 25.6 | 19.89 | | ng/L | 78 | 70 - 130 | |
| R-EVE | 25.6 | 17.74 | *- | ng/L | 69 | 70 - 130 | |
| N-methylperfluorooctane sulfonamidoethanol (NMeFOSE) | 25.6 | 23.35 | | ng/L | 91 | 52 - 131 | |
| Perfluoro-2- (perfluoroethoxy)propionic acid | 25.6 | 21.25 | | ng/L | 83 | 70 - 130 | |
| Perfluoropentanoic acid | 25.6 | 18.89 | | ng/L | 74 | 72 - 139 | |
| Perfluoropentanesulfonic acid | 24.0 | 19.53 | | ng/L | 81 | 71 - 136 | |
| 6:2 Fluorotelomer sulfonic acid | 24.3 | 20.81 | | ng/L | 86 | 57 - 137 | |
| 8:2 Fluorotelomer carboxylic acid | 25.6 | 20.66 | | ng/L | 81 | 70 - 130 | |
| Nafion Byproduct 1 (Nafion BP1) | 25.6 | <3.00 | *- | ng/L | 7 | 70 - 130 | |
| N-ethylperfluorooctanesulfonami doacetic acid (NEtFOSAA) | 25.6 | 18.17 | | ng/L | 71 | 54 - 134 | |
| Perfluorohexanoic acid | 25.6 | 20.63 | | ng/L | 81 | 66 - 137 | |
| Perfluorododecanoic acid | 25.6 | 19.88 | | ng/L | 78 | 63 - 140 | |
| N-methylperfluorooctane sulfonamide (NMeFOSA) | 25.6 | 23.01 | | ng/L | 90 | 49 - 141 | |
| Perfluoroctanoic acid | 25.6 | 19.82 | | ng/L | 77 | 65 - 136 | |
| Perfluorodecanoic acid | 25.6 | 20.01 | | ng/L | 78 | 63 - 137 | |
| Perfluorodecanesulfonic acid | 24.7 | 21.17 | | ng/L | 86 | 61 - 134 | |
| Perfluorohexanesulfonic acid | 23.3 | 16.91 | | ng/L | 72 | 60 - 128 | |
| 3-Perfluoropropylpropanoic acid (3:3 FTCA) | 25.6 | 20.39 | | ng/L | 80 | 70 - 130 | |
| Perfluorobutanoic acid | 25.6 | 20.83 | | ng/L | 81 | 62 - 156 | |
| Perfluorobutanesulfonic acid | 22.7 | 16.92 | | ng/L | 75 | 65 - 132 | |
| Perfluoroheptanoic acid | 25.6 | 19.32 | | ng/L | 75 | 66 - 141 | |
| Perfluoroheptanesulfonic acid | 24.4 | 19.38 | | ng/L | 80 | 67 - 135 | |
| Perfluorononanoic acid | 25.6 | 21.22 | | ng/L | 83 | 65 - 140 | |
| Perfluorotetradecanoic acid | 25.6 | 19.99 | | ng/L | 78 | 64 - 141 | |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | 25.6 | 26.51 | | ng/L | 104 | 70 - 130 | |
| 8:2 Fluorotelomer sulfonic acid | 24.5 | 19.76 | | ng/L | 81 | 56 - 140 | |
| Perfluoro(3,5-dioxahexanoic) acid (PFO2HxA) | 25.6 | 21.07 | | ng/L | 82 | 70 - 130 | |
| Perfluoro(3,5,7-trioxaoctanoic) acid (PFO3OA) | 25.6 | 19.81 | | ng/L | 77 | 70 - 130 | |
| Perfluoro(3,5,7,9-tetraoxadecan oic) acid (PFO4DA) | 25.6 | 21.76 | | ng/L | 85 | 70 - 130 | |
| Perfluoro-3,5,7,9,11-pentaoxado decanoic acid | 25.6 | 20.40 | | ng/L | 80 | 70 - 130 | |
| N-ethylperfluorooctane sulfonamide (NEtFOSA) | 25.6 | 20.98 | | ng/L | 82 | 50 - 136 | |
| Perfluoropropionic Acid (PPPrA) | 25.6 | 19.95 | | ng/L | 78 | 70 - 130 | |
| Perfluoropropanesulfonic acid | 23.4 | 21.69 | | ng/L | 93 | 70 - 130 | |
| 6:2 Fluorotelomer carboxylic acid | 25.6 | 21.42 | | ng/L | 84 | 70 - 130 | |
| 10:2 Fluorotelomer carboxylic acid | 25.6 | 22.19 | | ng/L | 87 | 70 - 130 | |

QC Sample Results

Client: Eastern Research Group, Inc.

Job ID: 410-66395-1

Project/Site: Groundwater PFAS-TO2

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCS 410-204503/2-A

Matrix: Water

Analysis Batch: 205207

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 204503

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|---|----------------|---------------|------------------|------|----|----------|--------|
| Perfluoro-2-methoxyacetic acid (PFMOAA) | 25.6 | 20.64 | | ng/L | 81 | 70 - 130 | |
| Perfluorohexadecanoic acid | 25.6 | 21.48 | | ng/L | 84 | 52 - 149 | |
| Perfluorononanesulfonic acid | 24.6 | 19.67 | | ng/L | 80 | 67 - 137 | |
| EVE Acid | 25.6 | <3.00 | *- | ng/L | 8 | 70 - 130 | |
| 8:2 Fluorotelomer unsaturated acid | 25.6 | 24.90 | | ng/L | 97 | 70 - 130 | |
| 6:2 Fluorotelomer unsaturated acid | 25.6 | 23.59 | | ng/L | 92 | 70 - 130 | |
| 10:2 Fluorotelomer unsaturated acid | 25.6 | 24.70 | | ng/L | 96 | 70 - 130 | |
| Perfluorotridecanoic acid | 25.6 | 23.05 | | ng/L | 90 | 58 - 146 | |
| Hydro-PS Acid | 25.6 | 19.55 | | ng/L | 76 | 70 - 130 | |
| Perfluoroctanesulfonamide | 25.6 | 21.71 | | ng/L | 85 | 55 - 130 | |
| 9-Chlorohexadecafluoro-3-oxanone-1-sulfonic acid(9Cl-PF3ONS) | 23.8 | 17.72 | | ng/L | 74 | 52 - 135 | |
| 4:2 Fluorotelomer sulfonic acid | 23.9 | 20.09 | | ng/L | 84 | 59 - 130 | |
| 11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUDS) | 23.8 | 19.63 | | ng/L | 82 | 45 - 134 | |
| Hydro-EVE Acid | 25.6 | 20.72 | | ng/L | 81 | 70 - 130 | |
| Perfluorododecanesulfonic acid | 24.8 | 20.88 | | ng/L | 84 | 54 - 136 | |
| Perfluoro-4-isopropoxybutanoic acid (PFIpOBA) | 25.6 | 20.42 | | ng/L | 80 | 70 - 130 | |
| 3-Perfluoroheptylpropanoic acid (7:3 FTCA) | 25.6 | 13.10 | *- | ng/L | 51 | 70 - 130 | |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | 25.6 | 18.51 | | ng/L | 72 | 70 - 130 | |
| 3-Perfluoropentylpropanoic acid (5:3 FTCA) | 25.6 | 20.75 | | ng/L | 81 | 70 - 130 | |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | 24.2 | 18.85 | | ng/L | 78 | 49 - 158 | |
| MTP | 25.6 | 20.37 | | ng/L | 80 | 70 - 130 | |

| Isotope Dilution | LCS | LCS | |
|------------------|-----------|-----------|----------|
| | %Recovery | Qualifier | Limits |
| d5-NEtFOSAA | 122 | | 37 - 164 |
| d3-NMeFOSAA | 106 | | 32 - 151 |
| 13C3 HFPO-DA | 108 | | 20 - 153 |
| d7-N-MeFOSE-M | 102 | | 10 - 143 |
| d9-N-EtFOSE-M | 113 | | 10 - 142 |
| M2-6:2 FTS | 100 | | 29 - 189 |
| M2-8:2 FTS | 114 | | 34 - 182 |
| 13C3 PFBS | 121 | | 19 - 178 |
| M2-4:2 FTS | 102 | | 20 - 187 |
| 13C5 PFHxA | 103 | | 31 - 142 |
| 13C9 PFNA | 105 | | 47 - 136 |
| 13C6 PFDA | 112 | | 47 - 128 |
| 13C7 PFUnA | 115 | | 40 - 135 |
| 13C3 PFHxS | 118 | | 32 - 145 |
| 13C2-PFDaDA | 108 | | 28 - 136 |
| d5-NEtPFOSA | 93 | | 10 - 108 |

Eurofins Lancaster Laboratories Env, LLC

QC Sample Results

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCS 410-204503/2-A

Matrix: Water

Analysis Batch: 205207

| Isotope Dilution | LCS | LCS | %Recovery | Qualifier | Limits |
|-------------------------------------|------------|------------|------------------|------------------|---------------|
| d3-NMePFOSA | | | 86 | | 10 - 107 |
| 13C2-2-Perfluorohexylethanoic acid | | | 164 | *5+ | 50 - 150 |
| 13C2-2-Perfluoroctylethanoic acid | | | 159 | *5+ | 50 - 150 |
| 13C2-2-Perfluorodecylethanoic acid | | | 154 | *5+ | 50 - 150 |
| 13C2-2H-Perfluoro-2-octenoic acid | | | 82 | | 50 - 150 |
| 13C2-2H-Perfluoro-2-decanoic acid | | | 83 | | 50 - 150 |
| 13C2-2H-Perfluoro-2-dodecanoic acid | | | 87 | | 50 - 150 |
| 13C4 PFBA | | | 112 | | 41 - 132 |
| 13C5 PFPeA | | | 119 | | 33 - 155 |
| 13C4 PFHpA | | | 108 | | 30 - 144 |
| 13C8 PFOA | | | 108 | | 49 - 127 |
| 13C8 PFOS | | | 112 | | 49 - 126 |
| 13C8 FOSA | | | 99 | | 10 - 143 |
| 13C2 PFTeDA | | | 113 | | 10 - 144 |

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 204503

Lab Sample ID: LCSD 410-204503/3-A

Matrix: Water

Analysis Batch: 205207

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 204503

| Analyte | Spike Added | LCSD | LCSD | Unit | D | %Rec. | RPD | Limit |
|---|--------------------|---------------|------------------|-------------|----------|--------------|------------|--------------|
| | | Result | Qualifier | | | | | |
| NVHOS | 25.6 | 18.61 | | ng/L | 73 | 70 - 130 | 1 | 30 |
| Perfluoro (2-ethoxyethane) sulfonic acid | 22.8 | 20.11 | | ng/L | 88 | 70 - 130 | 2 | 30 |
| 1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS) | 24.7 | 18.98 | | ng/L | 77 | 44 - 141 | 9 | 30 |
| Perfluoro-3-methoxypropanoic acid (PMPA) | 25.6 | 21.04 | | ng/L | 82 | 70 - 130 | 6 | 30 |
| Hexafluoropropylene Oxide Dimer Acid (HFPO-DA) | 25.6 | 19.68 | | ng/L | 77 | 37 - 147 | 2 | 30 |
| Perfluoro-4-ethylcyclohexanesulfonic acid | 23.6 | 24.27 | | ng/L | 103 | 70 - 130 | 4 | 30 |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | 25.6 | 24.15 | | ng/L | 94 | 70 - 130 | 1 | 30 |
| Perfluooctadecanoic acid | 25.6 | 23.19 | | ng/L | 91 | 32 - 167 | 1 | 30 |
| N-ethylperfluoroctane sulfonamidoethanol (NEtFOSE) | 25.6 | 22.49 | | ng/L | 88 | 49 - 128 | 12 | 30 |
| Perfluoroctanesulfonic acid | 23.7 | 21.23 | | ng/L | 90 | 51 - 126 | 5 | 30 |
| Perfluoroundecanoic acid | 25.6 | 22.04 | | ng/L | 86 | 62 - 138 | 8 | 30 |
| N-methylperfluoroctanesulfonamidoacetic acid (NMeFOSAA) | 25.6 | 20.54 | | ng/L | 80 | 58 - 143 | 5 | 30 |
| R-PSDA | 25.6 | 16.23 *- | | ng/L | 63 | 70 - 130 | 1 | 30 |
| Hydrolyzed PSDA | 25.6 | 17.27 *- | | ng/L | 67 | 70 - 130 | 6 | 30 |
| R-PSDCA | 25.6 | 20.03 | | ng/L | 78 | 70 - 130 | 1 | 30 |
| R-EVE | 25.6 | 18.28 | | ng/L | 71 | 70 - 130 | 3 | 30 |
| N-methylperfluoroctane sulfonamidoethanol (NMeFOSE) | 25.6 | 24.07 | | ng/L | 94 | 52 - 131 | 3 | 30 |

QC Sample Results

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCSD 410-204503/3-A

Matrix: Water

Analysis Batch: 205207

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 204503

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | Limits | RPD | RPD Limit |
|--|-------------|-------------|----------------|------|-----|----------|--------|-----|-----------|
| Perfluoro-2-(perfluoroethoxy)propionic acid | 25.6 | 22.14 | | ng/L | 86 | 70 - 130 | 4 | 30 | |
| Perfluoropentanoic acid | 25.6 | 19.29 | | ng/L | 75 | 72 - 139 | 2 | 30 | |
| Perfluoropentanesulfonic acid | 24.0 | 19.30 | | ng/L | 80 | 71 - 136 | 1 | 30 | |
| 6:2 Fluorotelomer sulfonic acid | 24.3 | 22.50 | | ng/L | 93 | 57 - 137 | 8 | 30 | |
| 8:2 Fluorotelomer carboxylic acid | 25.6 | 18.97 | | ng/L | 74 | 70 - 130 | 9 | 30 | |
| Nafion Byproduct 1 (Nafion BP1) | 25.6 | <3.00 | *- | ng/L | 6 | 70 - 130 | 17 | 30 | |
| N-ethylperfluoroctanesulfonamidoacetic acid (NEtFOSAA) | 25.6 | 18.75 | | ng/L | 73 | 54 - 134 | 3 | 30 | |
| Perfluorohexanoic acid | 25.6 | 20.15 | | ng/L | 79 | 66 - 137 | 2 | 30 | |
| Perfluorododecanoic acid | 25.6 | 20.55 | | ng/L | 80 | 63 - 140 | 3 | 30 | |
| N-methylperfluoroctane sulfonamide (NMeFOSA) | 25.6 | 22.56 | | ng/L | 88 | 49 - 141 | 2 | 30 | |
| Perfluoroctanoic acid | 25.6 | 20.94 | | ng/L | 82 | 65 - 136 | 5 | 30 | |
| Perfluorodecanoic acid | 25.6 | 20.39 | | ng/L | 80 | 63 - 137 | 2 | 30 | |
| Perfluorodecanesulfonic acid | 24.7 | 21.61 | | ng/L | 88 | 61 - 134 | 2 | 30 | |
| Perfluorohexanesulfonic acid | 23.3 | 17.32 | | ng/L | 74 | 60 - 128 | 2 | 30 | |
| 3-Perfluoropropylpropanoic acid (3:3 FTCA) | 25.6 | 21.10 | | ng/L | 82 | 70 - 130 | 3 | 30 | |
| Perfluorobutanoic acid | 25.6 | 20.85 | | ng/L | 81 | 62 - 156 | 0 | 30 | |
| Perfluorobutanesulfonic acid | 22.7 | 17.65 | | ng/L | 78 | 65 - 132 | 4 | 30 | |
| Perfluoroheptanoic acid | 25.6 | 20.90 | | ng/L | 82 | 66 - 141 | 8 | 30 | |
| Perfluoroheptanesulfonic acid | 24.4 | 19.82 | | ng/L | 81 | 67 - 135 | 2 | 30 | |
| Perfluorononanoic acid | 25.6 | 21.00 | | ng/L | 82 | 65 - 140 | 1 | 30 | |
| Perfluorotetradecanoic acid | 25.6 | 20.89 | | ng/L | 82 | 64 - 141 | 4 | 30 | |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | 25.6 | 26.38 | | ng/L | 103 | 70 - 130 | 1 | 30 | |
| 8:2 Fluorotelomer sulfonic acid | 24.5 | 17.87 | | ng/L | 73 | 56 - 140 | 10 | 30 | |
| Perfluoro(3,5-dioxahexanoic) acid (PFO2HxA) | 25.6 | 21.13 | | ng/L | 83 | 70 - 130 | 0 | 30 | |
| Perfluoro(3,5,7-trioxaoctanoic) acid (PFO3OA) | 25.6 | 19.57 | | ng/L | 76 | 70 - 130 | 1 | 30 | |
| Perfluoro(3,5,7,9-tetraoxadecanoic) acid (PFO4DA) | 25.6 | 22.52 | | ng/L | 88 | 70 - 130 | 3 | 30 | |
| Perfluoro-3,5,7,9,11-pentaoxadodecanoic acid | 25.6 | 20.20 | | ng/L | 79 | 70 - 130 | 1 | 30 | |
| N-ethylperfluoroctane sulfonamide (NEtFOSA) | 25.6 | 20.52 | | ng/L | 80 | 50 - 136 | 2 | 30 | |
| Perfluoropropionic Acid (PFPRA) | 25.6 | 20.06 | | ng/L | 78 | 70 - 130 | 1 | 30 | |
| Perfluoropropanesulfonic acid | 23.4 | 22.07 | | ng/L | 94 | 70 - 130 | 2 | 30 | |
| 6:2 Fluorotelomer carboxylic acid | 25.6 | 21.11 | | ng/L | 82 | 70 - 130 | 1 | 30 | |
| 10:2 Fluorotelomer carboxylic acid | 25.6 | 22.93 | | ng/L | 90 | 70 - 130 | 3 | 30 | |
| Perfluoro-2-methoxyacetic acid (PFMOAA) | 25.6 | 20.44 | | ng/L | 80 | 70 - 130 | 1 | 30 | |
| Perfluorohexadecanoic acid | 25.6 | 21.15 | | ng/L | 83 | 52 - 149 | 2 | 30 | |
| Perfluorononanesulfonic acid | 24.6 | 20.53 | | ng/L | 84 | 67 - 137 | 4 | 30 | |
| EVE Acid | 25.6 | <3.00 | *- | ng/L | 9 | 70 - 130 | 4 | 30 | |
| 8:2 Fluorotelomer unsaturated acid | 25.6 | 24.35 | | ng/L | 95 | 70 - 130 | 2 | 30 | |
| 6:2 Fluorotelomer unsaturated acid | 25.6 | 23.31 | | ng/L | 91 | 70 - 130 | 1 | 30 | |

Eurofins Lancaster Laboratories Env, LLC

QC Sample Results

Client: Eastern Research Group, Inc.

Job ID: 410-66395-1

Project/Site: Groundwater PFAS-TO2

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCSD 410-204503/3-A

Client Sample ID: Lab Control Sample Dup

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 205207

Prep Batch: 204503

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | Limits | RPD | RPD Limit |
|---|-------------|-------------|----------------|------|-----|----------|--------|-----|-----------|
| 10:2 Fluorotelomer unsaturated acid | 25.6 | 25.74 | | ng/L | 101 | 70 - 130 | 4 | 30 | |
| Perfluorotridecanoic acid | 25.6 | 23.07 | | ng/L | 90 | 58 - 146 | 0 | 30 | |
| Hydro-PS Acid | 25.6 | 19.19 | | ng/L | 75 | 70 - 130 | 2 | 30 | |
| Perfluorooctanesulfonamide | 25.6 | 21.37 | | ng/L | 83 | 55 - 130 | 2 | 30 | |
| 9-Chlorohexadecafluoro-3-oxanoneane-1-sulfonic acid(9Cl-PF3ONS) | 23.8 | 18.06 | | ng/L | 76 | 52 - 135 | 2 | 30 | |
| 4:2 Fluorotelomer sulfonic acid | 23.9 | 19.10 | | ng/L | 80 | 59 - 130 | 5 | 30 | |
| 11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS) | 23.8 | 19.66 | | ng/L | 83 | 45 - 134 | 0 | 30 | |
| Hydro-EVE Acid | 25.6 | 20.67 | | ng/L | 81 | 70 - 130 | 0 | 30 | |
| Perfluorododecanesulfonic acid | 24.8 | 21.58 | | ng/L | 87 | 54 - 136 | 3 | 30 | |
| Perfluoro-4-isopropoxybutanoic acid (PFIpOBA) | 25.6 | 20.43 | | ng/L | 80 | 70 - 130 | 0 | 30 | |
| 3-Perfluoroheptylpropanoic acid (7:3 FTCA) | 25.6 | 14.66 *- | | ng/L | 57 | 70 - 130 | 11 | 30 | |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | 25.6 | 18.38 | | ng/L | 72 | 70 - 130 | 1 | 30 | |
| 3-Perfluoropentylpropanoic acid (5:3 FTCA) | 25.6 | 22.24 | | ng/L | 87 | 70 - 130 | 7 | 30 | |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | 24.2 | 20.34 | | ng/L | 84 | 49 - 158 | 8 | 30 | |
| MTP | 25.6 | 20.71 | | ng/L | 81 | 70 - 130 | 2 | 30 | |

| Isotope Dilution | LCSD %Recovery | LCSD Qualifier | Limits |
|------------------------------------|----------------|----------------|----------|
| d5-NEtFOSAA | 136 | | 37 - 164 |
| d3-NMeFOSAA | 118 | | 32 - 151 |
| 13C3 HFPO-DA | 125 | | 20 - 153 |
| d7-N-MeFOSE-M | 112 | | 10 - 143 |
| d9-N-EtFOSE-M | 120 | | 10 - 142 |
| M2-6:2 FTS | 107 | | 29 - 189 |
| M2-8:2 FTS | 135 | | 34 - 182 |
| 13C3 PFBS | 129 | | 19 - 178 |
| M2-4:2 FTS | 114 | | 20 - 187 |
| 13C5 PFHxA | 118 | | 31 - 142 |
| 13C9 PFNA | 117 | | 47 - 136 |
| 13C6 PFDA | 119 | | 47 - 128 |
| 13C7 PFUnA | 123 | | 40 - 135 |
| 13C3 PFHxS | 129 | | 32 - 145 |
| 13C2-PFDODA | 120 | | 28 - 136 |
| d5-NEtPFOSA | 102 | | 10 - 108 |
| d3-NMePFOSA | 96 | | 10 - 107 |
| 13C2-2-Perfluorohexylethanoic acid | 179 *5+ | | 50 - 150 |
| 13C2-2-Perfluorooctylethanoic acid | 186 *5+ | | 50 - 150 |
| 13C2-2-Perfluorodecylethanoic acid | 170 *5+ | | 50 - 150 |
| 13C2-2H-Perfluoro-2-octenoic acid | 91 | | 50 - 150 |

QC Sample Results

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCSD 410-204503/3-A

Client Sample ID: Lab Control Sample Dup

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 205207

Prep Batch: 204503

| Isotope Dilution | LCSD | LCSD | |
|-------------------------------------|-----------|-----------|----------|
| | %Recovery | Qualifier | Limits |
| 13C2-2H-Perfluoro-2-decanoic acid | 94 | | 50 - 150 |
| 13C2-2H-Perfluoro-2-dodecanoic acid | 94 | | 50 - 150 |
| 13C4 PFBA | 117 | | 41 - 132 |
| 13C5 PFPeA | 120 | | 33 - 155 |
| 13C4 PFHpA | 115 | | 30 - 144 |
| 13C8 PFOA | 117 | | 49 - 127 |
| 13C8 PFOS | 120 | | 49 - 126 |
| 13C8 FOSA | 108 | | 10 - 143 |
| 13C2 PFTeDA | 127 | | 10 - 144 |

Lab Sample ID: MB 410-205834/1-A

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 206673

Prep Batch: 205834

| Analyte | MB | MB | | | | D | Prepared | Analyzed | Dil Fac |
|---|--------|-----------|------|-------|------|---|----------------|----------------|---------|
| | Result | Qualifier | RL | MDL | Unit | | | | |
| NVHOS | <0.200 | | 2.00 | 0.200 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| Perfluoro (2-ethoxyethane) sulfonic acid | <0.200 | | 2.00 | 0.200 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| 1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS) | <1.00 | | 5.00 | 1.00 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| Perfluoro-3-methoxypropanoic acid (PMPA) | <0.200 | | 2.00 | 0.200 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| Hexafluoropropylene Oxide Dimer Acid (HFPO-DA) | <0.500 | | 3.00 | 0.500 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| Perfluoro-4-ethylcyclohexanesulfonic acid | <0.200 | | 2.00 | 0.200 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | <0.200 | | 2.00 | 0.200 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| Perfluoroctadecanoic acid | <1.00 | | 3.00 | 1.00 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| N-ethylperfluoroctane sulfonamidoethanol (NMeFOSE) | <1.00 | | 3.00 | 1.00 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| Perfluoroctanesulfonic acid | <0.500 | | 2.00 | 0.500 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| Perfluoroundecanoic acid | <0.500 | | 2.00 | 0.500 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| N-methylperfluoroctanesulfonamidoacetic acid (NMeFOSAA) | <0.600 | | 2.00 | 0.600 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| R-PSDA | <0.500 | | 2.00 | 0.500 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| Hydrolyzed PSDA | <0.400 | | 2.00 | 0.400 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| R-PSDCA | <0.200 | | 2.00 | 0.200 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| R-EVE | <0.400 | | 2.00 | 0.400 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| N-methylperfluoroctane sulfonamidoethanol (NMeFOSE) | <1.00 | | 3.00 | 1.00 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| Perfluoro-2-(perfluoroethoxy)propionic acid | <0.200 | | 2.00 | 0.200 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| Perfluoropentanoic acid | <0.500 | | 2.00 | 0.500 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| Perfluoropentanesulfonic acid | <0.500 | | 2.00 | 0.500 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| 6:2 Fluorotelomer sulfonic acid | <2.00 | | 5.00 | 2.00 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| 8:2 Fluorotelomer carboxylic acid | <0.400 | | 2.00 | 0.400 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| Nafion Byproduct 1 (Nafion BP1) | <3.00 | | 10.0 | 3.00 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| N-ethylperfluoroctanesulfonamidoacetic acid (NMeFOSAA) | <0.500 | | 3.00 | 0.500 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |

QC Sample Results

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: MB 410-205834/1-A

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 206673

Prep Batch: 205834

| Analyte | MB | MB | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--|--------|-----------|------|-------|------|---|----------------|----------------|---------|
| | Result | Qualifier | | | | | | | |
| Perfluorohexanoic acid | <0.500 | | 2.00 | 0.500 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| Perfluorododecanoic acid | <0.500 | | 2.00 | 0.500 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| N-methylperfluoroctane sulfonamide (NMeFOSA) | <1.00 | | 3.00 | 1.00 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| Perfluorooctanoic acid | <0.500 | | 2.00 | 0.500 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| Perfluorodecanoic acid | <0.500 | | 2.00 | 0.500 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| Perfluorodecanesulfonic acid | <0.500 | | 2.00 | 0.500 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| Perfluorohexanesulfonic acid | <0.500 | | 2.00 | 0.500 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| 3-Perfluoropropylpropanoic acid (3:3 FTCA) | <0.300 | | 2.00 | 0.300 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| Perfluorobutanoic acid | <2.00 | | 5.00 | 2.00 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| Perfluorobutanesulfonic acid | <0.500 | | 2.00 | 0.500 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| Perfluoroheptanoic acid | <0.500 | | 2.00 | 0.500 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| Perfluoroheptanesulfonic acid | <0.500 | | 2.00 | 0.500 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| Perfluorononanoic acid | <0.500 | | 2.00 | 0.500 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| Perfluorotetradecanoic acid | <0.500 | | 2.00 | 0.500 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | <0.200 | | 2.00 | 0.200 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| 8:2 Fluorotelomer sulfonic acid | <1.00 | | 3.00 | 1.00 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| Perfluoro(3,5-dioxahexanoic) acid (PFO2HxA) | <0.200 | | 2.00 | 0.200 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| Perfluoro(3,5,7-trioxaoctanoic) acid (PFO3OA) | <0.200 | | 2.00 | 0.200 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| Perfluoro(3,5,7,9-tetraoxadecanoic) acid (PFO4DA) | <0.300 | | 2.00 | 0.300 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| Perfluoro-3,5,7,9,11-pentaoxadodecanoic acid | <2.00 | | 5.00 | 2.00 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| N-ethylperfluoroctane sulfonamide (NETFOSA) | <1.00 | | 5.00 | 1.00 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| Perfluoropropionic Acid (PPPrA) | <2.00 | | 5.00 | 2.00 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| Perfluoropropanesulfonic acid | <0.200 | | 2.00 | 0.200 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| 6:2 Fluorotelomer carboxylic acid | <0.400 | | 2.00 | 0.400 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| 10:2 Fluorotelomer carboxylic acid | <0.500 | | 2.00 | 0.500 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| Perfluoro-2-methoxyacetic acid (PFMOAA) | <0.200 | | 2.00 | 0.200 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| Perfluorohexadecanoic acid | <1.00 | | 3.00 | 1.00 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| Perfluorononanesulfonic acid | <0.500 | | 2.00 | 0.500 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| EVE Acid | <3.00 | | 10.0 | 3.00 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| 8:2 Fluorotelemer unsaturated acid | <0.200 | | 2.00 | 0.200 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| 6:2 Fluorotelemer unsaturated acid | <0.200 | | 2.00 | 0.200 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| 10:2 Fluorotelemer unsaturated acid | <0.200 | | 2.00 | 0.200 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| Perfluorotridecanoic acid | <0.500 | | 2.00 | 0.500 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| Hydro-PS Acid | <0.200 | | 2.00 | 0.200 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| Perfluoroctanesulfonamide | <0.500 | | 2.00 | 0.500 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| 9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS) | <0.500 | | 2.00 | 0.500 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| 4:2 Fluorotelomer sulfonic acid | <0.500 | | 2.00 | 0.500 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| 11-Chloroeicosfluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS) | <0.500 | | 2.00 | 0.500 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| Hydro-EVE Acid | <0.200 | | 2.00 | 0.200 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| Perfluorododecanesulfonic acid | <0.500 | | 3.00 | 0.500 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |

QC Sample Results

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: MB 410-205834/1-A

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 206673

Prep Batch: 205834

| Analyte | MB | MB | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---------|-----------|----------|----------|----------|---------|----------------|----------------|---------|
| | Result | Qualifier | | | | | | | |
| Perfluoro-4-isopropoxybutanoic acid (PFIPoBA) | <0.200 | | 2.00 | 0.200 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| 3-Perfluoroheptylpropanoic acid (7:3 FTCA) | <0.300 | | 2.00 | 0.300 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | <0.200 | | 2.00 | 0.200 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| 3-Perfluoropentylpropanoic acid (5:3 FTCA) | <0.200 | | 2.00 | 0.200 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | <0.500 | | 2.00 | 0.500 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| MTP | <2.00 | | 5.00 | 2.00 | ng/L | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| <hr/> | | | | | | | | | |
| Isotope Dilution | MB | MB | Limits | Prepared | Analyzed | Dil Fac | 11 | 12 | 13 |
| d5-NEtFOSAA | 144 | | | | | | | | |
| d3-NMeFOSAA | 128 | | 32 - 151 | | | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| 13C3 HFPO-DA | 154 *5+ | | 20 - 153 | | | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| d7-N-MeFOSE-M | 109 | | 10 - 143 | | | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| d9-N-EtFOSE-M | 114 | | 10 - 142 | | | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| M2-6:2 FTS | 131 | | 29 - 189 | | | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| M2-8:2 FTS | 152 | | 34 - 182 | | | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| 13C3 PFBS | 150 | | 19 - 178 | | | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| M2-4:2 FTS | 150 | | 20 - 187 | | | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| 13C5 PFHxA | 148 *5+ | | 31 - 142 | | | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| 13C9 PFNA | 145 *5+ | | 47 - 136 | | | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| 13C6 PFDA | 149 *5+ | | 47 - 128 | | | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| 13C7 PFUnA | 139 *5+ | | 40 - 135 | | | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| 13C3 PFHxS | 153 *5+ | | 32 - 145 | | | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| 13C2-PFDaDA | 147 *5+ | | 28 - 136 | | | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| d5-NEtPFOSA | 110 *5+ | | 10 - 108 | | | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| d3-NMePFOSA | 98 | | 10 - 107 | | | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| 13C2-2-Perfluorohexylethanoic acid | 169 *5+ | | 50 - 150 | | | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| 13C2-2-Perfluorooctylethanoic acid | 152 *5+ | | 50 - 150 | | | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| 13C2-2-Perfluorodecylethanoic acid | 142 | | 50 - 150 | | | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| 13C2-2H-Perfluoro-2-octenoic acid | 150 | | 50 - 150 | | | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| 13C2-2H-Perfluoro-2-decanoic acid | 133 | | 50 - 150 | | | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| 13C2-2H-Perfluoro-2-dodecanoic acid | 134 | | 50 - 150 | | | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| 13C4 PFBA | 141 *5+ | | 41 - 132 | | | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| 13C5 PFPeA | 149 | | 33 - 155 | | | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| 13C4 PFHpA | 152 *5+ | | 30 - 144 | | | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| 13C8 PFOA | 145 *5+ | | 49 - 127 | | | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| 13C8 PFOS | 144 *5+ | | 49 - 126 | | | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| 13C8 FOSA | 127 | | 10 - 143 | | | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |
| 13C2 PFTeDA | 128 | | 10 - 144 | | | | 12/15/21 17:02 | 12/18/21 01:18 | 1 |

QC Sample Results

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCS 410-205834/2-A

Matrix: Water

Analysis Batch: 206673

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 205834

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. | Limits |
|---|----------------|---------------|------------------|------|---|------|----------|--------|
| NVHOS | 25.6 | 20.97 | | ng/L | | 82 | 70 - 130 | |
| Perfluoro (2-ethoxyethane)sulfonic acid | 22.8 | 18.41 | | ng/L | | 81 | 70 - 130 | |
| 1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS) | 24.7 | 18.81 | | ng/L | | 76 | 44 - 141 | |
| Perfluoro-3-methoxypropanoic acid (PMPA) | 25.6 | 20.34 | | ng/L | | 79 | 70 - 130 | |
| Hexafluoropropylene Oxide Dimer Acid (HFPO-DA) | 25.6 | 21.72 | | ng/L | | 85 | 37 - 147 | |
| Perfluoro-4-ethylcyclohexanesulfonic acid | 23.6 | 21.40 | | ng/L | | 91 | 70 - 130 | |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | 25.6 | 23.00 | | ng/L | | 90 | 70 - 130 | |
| Perfluoroctadecanoic acid | 25.6 | 19.61 | | ng/L | | 77 | 32 - 167 | |
| N-ethylperfluoroctane sulfonamidoethanol (NEtFOSE) | 25.6 | 20.41 | | ng/L | | 80 | 49 - 128 | |
| Perfluoroctanesulfonic acid | 23.7 | 20.16 | | ng/L | | 85 | 51 - 126 | |
| Perfluoroundecanoic acid | 25.6 | 22.88 | | ng/L | | 89 | 62 - 138 | |
| N-methylperfluoroctanesulfonamidoacetic acid (NMeFOSAA) | 25.6 | 22.92 | | ng/L | | 90 | 58 - 143 | |
| R-PSDA | 25.6 | 2.927 | *- | ng/L | | 11 | 70 - 130 | |
| Hydrolyzed PSDA | 25.6 | 3.215 | *- | ng/L | | 13 | 70 - 130 | |
| R-PSDCA | 25.6 | 19.72 | | ng/L | | 77 | 70 - 130 | |
| R-EVE | 25.6 | 5.577 | *- | ng/L | | 22 | 70 - 130 | |
| N-methylperfluoroctane sulfonamidoethanol (NMeFOSE) | 25.6 | 23.09 | | ng/L | | 90 | 52 - 131 | |
| Perfluoro-2-(perfluoroethoxy)propionic acid | 25.6 | 21.52 | | ng/L | | 84 | 70 - 130 | |
| Perfluoropentanoic acid | 25.6 | 19.17 | | ng/L | | 75 | 72 - 139 | |
| Perfluoropentanesulfonic acid | 24.0 | 19.82 | | ng/L | | 83 | 71 - 136 | |
| 6:2 Fluorotelomer sulfonic acid | 24.3 | 21.91 | | ng/L | | 90 | 57 - 137 | |
| 8:2 Fluorotelomer carboxylic acid | 25.6 | 21.57 | | ng/L | | 84 | 70 - 130 | |
| Nafion Byproduct 1 (Nafion BP1) | 25.6 | <3.00 | *- | ng/L | | 1 | 70 - 130 | |
| N-ethylperfluoroctanesulfonamidoacetic acid (NMeFOSAA) | 25.6 | 23.17 | | ng/L | | 91 | 54 - 134 | |
| Perfluorohexanoic acid | 25.6 | 21.79 | | ng/L | | 85 | 66 - 137 | |
| Perfluorododecanoic acid | 25.6 | 21.15 | | ng/L | | 83 | 63 - 140 | |
| N-methylperfluoroctane sulfonamide (NMeFOSA) | 25.6 | 20.47 | | ng/L | | 80 | 49 - 141 | |
| Perfluoroctanoic acid | 25.6 | 23.03 | | ng/L | | 90 | 65 - 136 | |
| Perfluorodecanoic acid | 25.6 | 22.10 | | ng/L | | 86 | 63 - 137 | |
| Perfluorodecanesulfonic acid | 24.7 | 18.01 | | ng/L | | 73 | 61 - 134 | |
| Perfluorohexanesulfonic acid | 23.3 | 20.16 | | ng/L | | 86 | 60 - 128 | |
| 3-Perfluoropropylpropanoic acid (3:3 FTCA) | 25.6 | 25.24 | | ng/L | | 99 | 70 - 130 | |
| Perfluorobutanoic acid | 25.6 | 18.76 | | ng/L | | 73 | 62 - 156 | |
| Perfluorobutanesulfonic acid | 22.7 | 19.07 | | ng/L | | 84 | 65 - 132 | |
| Perfluoroheptanoic acid | 25.6 | 23.32 | | ng/L | | 91 | 66 - 141 | |
| Perfluoroheptanesulfonic acid | 24.4 | 18.37 | | ng/L | | 75 | 67 - 135 | |
| Perfluorononanoic acid | 25.6 | 20.02 | | ng/L | | 78 | 65 - 140 | |
| Perfluorotetradecanoic acid | 25.6 | 22.53 | | ng/L | | 88 | 64 - 141 | |

QC Sample Results

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCS 410-205834/2-A

Matrix: Water

Analysis Batch: 206673

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 205834

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | Limits |
|---|----------------|---------------|------------------|------|-----|----------|--------|
| Perfluoro-3-methoxypropanoic acid (PFMPA) | 25.6 | 22.70 | | ng/L | 89 | 70 - 130 | |
| 8:2 Fluorotelomer sulfonic acid | 24.5 | 18.94 | | ng/L | 77 | 56 - 140 | |
| Perfluoro(3,5-dioxahexanoic) acid (PFO2HxA) | 25.6 | 20.85 | | ng/L | 81 | 70 - 130 | |
| Perfluoro(3,5,7-trioxaoctanoic) acid (PFO3OA) | 25.6 | 21.16 | | ng/L | 83 | 70 - 130 | |
| Perfluoro(3,5,7,9-tetraoxadecanoic) acid (PFO4DA) | 25.6 | 21.71 | | ng/L | 85 | 70 - 130 | |
| Perfluoro-3,5,7,9,11-pentaoxadodecanoic acid | 25.6 | 21.39 | | ng/L | 84 | 70 - 130 | |
| N-ethylperfluoroctane sulfonamide (NEtFOSA) | 25.6 | 22.14 | | ng/L | 86 | 50 - 136 | |
| Perfluoropropionic Acid (PPPrA) | 25.6 | 21.08 | | ng/L | 82 | 70 - 130 | |
| Perfluoropropanesulfonic acid | 23.4 | 20.65 | | ng/L | 88 | 70 - 130 | |
| 6:2 Fluorotelomer carboxylic acid | 25.6 | 18.43 | | ng/L | 72 | 70 - 130 | |
| 10:2 Fluorotelomer carboxylic acid | 25.6 | 22.77 | | ng/L | 89 | 70 - 130 | |
| Perfluoro-2-methoxyacetic acid (PFMOAA) | 25.6 | 19.93 | | ng/L | 78 | 70 - 130 | |
| Perfluorohexadecanoic acid | 25.6 | 17.94 | | ng/L | 70 | 52 - 149 | |
| Perfluorononanesulfonic acid | 24.6 | 18.52 | | ng/L | 75 | 67 - 137 | |
| EVE Acid | 25.6 | <3.00 | *- | ng/L | 4 | 70 - 130 | |
| 8:2 Fluorotelomer unsaturated acid | 25.6 | 23.15 | | ng/L | 90 | 70 - 130 | |
| 6:2 Fluorotelomer unsaturated acid | 25.6 | 23.15 | | ng/L | 90 | 70 - 130 | |
| 10:2 Fluorotelomer unsaturated acid | 25.6 | 26.23 | | ng/L | 102 | 70 - 130 | |
| Perfluorotridecanoic acid | 25.6 | 21.82 | | ng/L | 85 | 58 - 146 | |
| Hydro-PS Acid | 25.6 | 19.43 | | ng/L | 76 | 70 - 130 | |
| Perfluoroctanesulfonamide | 25.6 | 22.13 | | ng/L | 86 | 55 - 130 | |
| 9-Chlorohexadecafluoro-3-oxanone-1-sulfonic acid(9Cl-PF3ONS) | 23.8 | 19.89 | | ng/L | 84 | 52 - 135 | |
| 4:2 Fluorotelomer sulfonic acid | 23.9 | 19.69 | | ng/L | 82 | 59 - 130 | |
| 11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS) | 23.8 | 19.38 | | ng/L | 81 | 45 - 134 | |
| Hydro-EVE Acid | 25.6 | 22.00 | | ng/L | 86 | 70 - 130 | |
| Perfluorododecanesulfonic acid | 24.8 | 18.06 | | ng/L | 73 | 54 - 136 | |
| Perfluoro-4-isopropoxybutanoic acid (PFIpOBA) | 25.6 | 21.99 | | ng/L | 86 | 70 - 130 | |
| 3-Perfluoroheptylpropanoic acid (7:3 FTCA) | 25.6 | 16.44 | *- | ng/L | 64 | 70 - 130 | |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | 25.6 | 18.74 | | ng/L | 73 | 70 - 130 | |
| 3-Perfluoropentylpropanoic acid (5:3 FTCA) | 25.6 | 22.88 | | ng/L | 89 | 70 - 130 | |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | 24.2 | 21.40 | | ng/L | 88 | 49 - 158 | |
| MTP | 25.6 | 20.15 | | ng/L | 79 | 70 - 130 | |

QC Sample Results

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

| <i>Isotope Dilution</i> | <i>LCS %Recovery</i> | <i>LCS Qualifier</i> | <i>Limits</i> |
|--------------------------------------|----------------------|----------------------|---------------|
| d5-NEtFOSAA | 118 | | 37 - 164 |
| d3-NMeFOSAA | 118 | | 32 - 151 |
| 13C3 HFPO-DA | 128 | | 20 - 153 |
| d7-N-MeFOSE-M | 101 | | 10 - 143 |
| d9-N-EtFOSE-M | 109 | | 10 - 142 |
| M2-6:2 FTS | 113 | | 29 - 189 |
| M2-8:2 FTS | 135 | | 34 - 182 |
| 13C3 PFBS | 142 | | 19 - 178 |
| M2-4:2 FTS | 121 | | 20 - 187 |
| 13C5 PFHxA | 129 | | 31 - 142 |
| 13C9 PFNA | 143 *5+ | | 47 - 136 |
| 13C6 PFDA | 133 *5+ | | 47 - 128 |
| 13C7 PFUnA | 127 | | 40 - 135 |
| 13C3 PFHxS | 139 | | 32 - 145 |
| 13C2-PFDaDA | 124 | | 28 - 136 |
| d5-NEtPFOSA | 98 | | 10 - 108 |
| d3-NMePFOSA | 98 | | 10 - 107 |
| 13C2-2-Perfluorohexylethanoic acid | 157 *5+ | | 50 - 150 |
| 13C2-2-Perfluoroctylethanoic acid | 137 | | 50 - 150 |
| 13C2-2-Perfluorodecylethanoic acid | 121 | | 50 - 150 |
| 13C2-2H-Perfluoro-2-octenoic acid | 138 | | 50 - 150 |
| 13C2-2H-Perfluoro-2-decanoic acid | 129 | | 50 - 150 |
| 13C2-2H-Perfluoro-2-dodecenoi c acid | 118 | | 50 - 150 |
| 13C4 PFBA | 130 | | 41 - 132 |
| 13C5 PFPeA | 139 | | 33 - 155 |
| 13C4 PFHpA | 137 | | 30 - 144 |
| 13C8 PFOA | 139 *5+ | | 49 - 127 |
| 13C8 PFOS | 132 *5+ | | 49 - 126 |
| 13C8 FOSA | 116 | | 10 - 143 |
| 13C2 PFTeDA | 118 | | 10 - 144 |

Lab Sample ID: LCSD 410-205834/3-A

Matrix: Water

Analysis Batch: 206673

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 205834

| Analyte | Spike Added | LCSD | | Unit | D | %Rec. | %Rec. | | RPD | Limit |
|--|-------------|--------|-----------|------|----|----------|--------|-----|-----|-------|
| | | Result | Qualifier | | | | Limits | RPD | | |
| NVHOS | 25.6 | 21.84 | | ng/L | 85 | 70 - 130 | 4 | 30 | | |
| Perfluoro (2-ethoxyethane) sulfonic acid | 22.8 | 18.36 | | ng/L | 81 | 70 - 130 | 0 | 30 | | |
| 1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS) | 24.7 | 20.36 | | ng/L | 82 | 44 - 141 | 8 | 30 | | |
| Perfluoro-3-methoxypropanoic acid (PMPA) | 25.6 | 21.34 | | ng/L | 83 | 70 - 130 | 5 | 30 | | |
| Hexafluoropropylene Oxide | 25.6 | 19.53 | | ng/L | 76 | 37 - 147 | 11 | 30 | | |
| Dimer Acid (HFPO-DA) | | | | | | | | | | |
| Perfluoro-4-ethylcyclohexanesulfonic acid | 23.6 | 22.06 | | ng/L | 93 | 70 - 130 | 3 | 30 | | |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | 25.6 | 23.81 | | ng/L | 93 | 70 - 130 | 3 | 30 | | |

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QC Sample Results

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCSD 410-205834/3-A

Matrix: Water

Analysis Batch: 206673

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 205834

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | Limits | RPD | RPD Limit |
|---|-------------|-------------|----------------|------|----|----------|--------|-----|-----------|
| Perfluoroctadecanoic acid | 25.6 | 19.01 | | ng/L | 74 | 32 - 167 | 3 | 30 | |
| N-ethylperfluoroctane sulfonamidoethanol (NEtFOSE) | 25.6 | 20.78 | | ng/L | 81 | 49 - 128 | 2 | 30 | |
| Perfluoroctanesulfonic acid | 23.7 | 20.67 | | ng/L | 87 | 51 - 126 | 2 | 30 | |
| Perfluoroundecanoic acid | 25.6 | 21.26 | | ng/L | 83 | 62 - 138 | 7 | 30 | |
| N-methylperfluoroctanesulfonamidoacetic acid (NMeFOSAA) | 25.6 | 21.82 | | ng/L | 85 | 58 - 143 | 5 | 30 | |
| R-PSDA | 25.6 | 4.194 *- *1 | | ng/L | 16 | 70 - 130 | 36 | 30 | |
| Hydrolyzed PSDA | 25.6 | 4.763 *- *1 | | ng/L | 19 | 70 - 130 | 39 | 30 | |
| R-PSDCA | 25.6 | 20.51 | | ng/L | 80 | 70 - 130 | 4 | 30 | |
| R-EVE | 25.6 | 7.310 *- | | ng/L | 29 | 70 - 130 | 27 | 30 | |
| N-methylperfluoroctane sulfonamidoethanol (NMeFOSE) | 25.6 | 23.34 | | ng/L | 91 | 52 - 131 | 1 | 30 | |
| Perfluoro-2-(perfluoroethoxy)propionic acid | 25.6 | 20.78 | | ng/L | 81 | 70 - 130 | 3 | 30 | |
| Perfluoropentanoic acid | 25.6 | 18.61 | | ng/L | 73 | 72 - 139 | 3 | 30 | |
| Perfluoropentanesulfonic acid | 24.0 | 20.31 | | ng/L | 85 | 71 - 136 | 2 | 30 | |
| 6:2 Fluorotelomer sulfonic acid | 24.3 | 20.30 | | ng/L | 84 | 57 - 137 | 8 | 30 | |
| 8:2 Fluorotelomer carboxylic acid | 25.6 | 17.98 | | ng/L | 70 | 70 - 130 | 18 | 30 | |
| Nafion Byproduct 1 (Nafion BP1) | 25.6 | <3.00 *- | | ng/L | 2 | 70 - 130 | 25 | 30 | |
| N-ethylperfluoroctanesulfonamidoacetic acid (NEtFOSAA) | 25.6 | 20.37 | | ng/L | 80 | 54 - 134 | 13 | 30 | |
| Perfluorohexanoic acid | 25.6 | 21.27 | | ng/L | 83 | 66 - 137 | 2 | 30 | |
| Perfluorododecanoic acid | 25.6 | 21.32 | | ng/L | 83 | 63 - 140 | 1 | 30 | |
| N-methylperfluoroctane sulfonamide (NMeFOSA) | 25.6 | 19.78 | | ng/L | 77 | 49 - 141 | 3 | 30 | |
| Perfluoroctanoic acid | 25.6 | 23.18 | | ng/L | 91 | 65 - 136 | 1 | 30 | |
| Perfluorodecanoic acid | 25.6 | 20.80 | | ng/L | 81 | 63 - 137 | 6 | 30 | |
| Perfluorodecanesulfonic acid | 24.7 | 19.99 | | ng/L | 81 | 61 - 134 | 10 | 30 | |
| Perfluorohexanesulfonic acid | 23.3 | 20.54 | | ng/L | 88 | 60 - 128 | 2 | 30 | |
| 3-Perfluoropropylpropanoic acid (3:3 FTCA) | 25.6 | 23.36 | | ng/L | 91 | 70 - 130 | 8 | 30 | |
| Perfluorobutanoic acid | 25.6 | 18.41 | | ng/L | 72 | 62 - 156 | 2 | 30 | |
| Perfluorobutanesulfonic acid | 22.7 | 20.51 | | ng/L | 91 | 65 - 132 | 7 | 30 | |
| Perfluoroheptanoic acid | 25.6 | 23.46 | | ng/L | 92 | 66 - 141 | 1 | 30 | |
| Perfluoroheptanesulfonic acid | 24.4 | 17.75 | | ng/L | 73 | 67 - 135 | 3 | 30 | |
| Perfluorononanoic acid | 25.6 | 21.87 | | ng/L | 85 | 65 - 140 | 9 | 30 | |
| Perfluorotetradecanoic acid | 25.6 | 22.64 | | ng/L | 88 | 64 - 141 | 0 | 30 | |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | 25.6 | 23.03 | | ng/L | 90 | 70 - 130 | 1 | 30 | |
| 8:2 Fluorotelomer sulfonic acid | 24.5 | 20.12 | | ng/L | 82 | 56 - 140 | 6 | 30 | |
| Perfluoro(3,5-dioxahexanoic) acid (PFO2HxA) | 25.6 | 21.51 | | ng/L | 84 | 70 - 130 | 3 | 30 | |
| Perfluoro(3,5,7-trioxaoctanoic) acid (PFO3OA) | 25.6 | 21.36 | | ng/L | 83 | 70 - 130 | 1 | 30 | |
| Perfluoro(3,5,7,9-tetraoxadecanooic) acid (PFO4DA) | 25.6 | 21.96 | | ng/L | 86 | 70 - 130 | 1 | 30 | |
| Perfluoro-3,5,7,9,11-pentaoxadodecanoic acid | 25.6 | 21.44 | | ng/L | 84 | 70 - 130 | 0 | 30 | |
| N-ethylperfluoroctane sulfonamide (NEtFOSA) | 25.6 | 22.93 | | ng/L | 90 | 50 - 136 | 3 | 30 | |
| Perfluoropropionic Acid (PFPPA) | 25.6 | 21.07 | | ng/L | 82 | 70 - 130 | 0 | 30 | |

Eurofins Lancaster Laboratories Env, LLC

QC Sample Results

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCSD 410-205834/3-A

Client Sample ID: Lab Control Sample Dup

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 206673

Prep Batch: 205834

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | Limits | RPD | RPD Limit |
|---|----------------|----------------|-------------------|------|---|------|----------|-----|--------------|
| Perfluoropropanesulfonic acid | 23.4 | 20.36 | | ng/L | | 87 | 70 - 130 | 1 | 30 |
| 6:2 Fluorotelomer carboxylic acid | 25.6 | 18.76 | | ng/L | | 73 | 70 - 130 | 2 | 30 |
| 10:2 Fluorotelomer carboxylic acid | 25.6 | 21.69 | | ng/L | | 85 | 70 - 130 | 5 | 30 |
| Perfluoro-2-methoxyacetic acid (PFMOAA) | 25.6 | 20.09 | | ng/L | | 78 | 70 - 130 | 1 | 30 |
| Perfluorohexadecanoic acid | 25.6 | 17.84 | | ng/L | | 70 | 52 - 149 | 1 | 30 |
| Perfluorononanesulfonic acid | 24.6 | 18.87 | | ng/L | | 77 | 67 - 137 | 2 | 30 |
| EVE Acid | 25.6 | <3.00 | *- | ng/L | | 5 | 70 - 130 | 18 | 30 |
| 8:2 Fluorotelomer unsaturated acid | 25.6 | 21.82 | | ng/L | | 85 | 70 - 130 | 6 | 30 |
| 6:2 Fluorotelomer unsaturated acid | 25.6 | 23.50 | | ng/L | | 92 | 70 - 130 | 1 | 30 |
| 10:2 Fluorotelomer unsaturated acid | 25.6 | 25.87 | | ng/L | | 101 | 70 - 130 | 1 | 30 |
| Perfluorotridecanoic acid | 25.6 | 20.86 | | ng/L | | 81 | 58 - 146 | 5 | 30 |
| Hydro-PS Acid | 25.6 | 20.90 | | ng/L | | 82 | 70 - 130 | 7 | 30 |
| Perfluorooctanesulfonamide | 25.6 | 23.11 | | ng/L | | 90 | 55 - 130 | 4 | 30 |
| 9-Chlorohexadecafluoro-3-oxanone-1-sulfonic acid(9Cl-PF3ONS) | 23.8 | 20.50 | | ng/L | | 86 | 52 - 135 | 3 | 30 |
| 4:2 Fluorotelomer sulfonic acid | 23.9 | 18.47 | | ng/L | | 77 | 59 - 130 | 6 | 30 |
| 11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OuDs) | 23.8 | 20.75 | | ng/L | | 87 | 45 - 134 | 7 | 30 |
| Hydro-EVE Acid | 25.6 | 22.06 | | ng/L | | 86 | 70 - 130 | 0 | 30 |
| Perfluorododecanesulfonic acid | 24.8 | 19.11 | | ng/L | | 77 | 54 - 136 | 6 | 30 |
| Perfluoro-4-isopropoxybutanoic acid (PFIpOBA) | 25.6 | 21.94 | | ng/L | | 86 | 70 - 130 | 0 | 30 |
| 3-Perfluorohexylpropanoic acid (7:3 FTCA) | 25.6 | 17.11 | *- | ng/L | | 67 | 70 - 130 | 4 | 30 |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | 25.6 | 18.93 | | ng/L | | 74 | 70 - 130 | 1 | 30 |
| 3-Perfluoropentylpropanoic acid (5:3 FTCA) | 25.6 | 25.36 | | ng/L | | 99 | 70 - 130 | 10 | 30 |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | 24.2 | 23.38 | | ng/L | | 97 | 49 - 158 | 9 | 30 |
| MTP | 25.6 | 20.28 | | ng/L | | 79 | 70 - 130 | 1 | 30 |

| Isotope Dilution | LCSD | LCSD | Limits |
|------------------|-----------|-----------|----------|
| | %Recovery | Qualifier | |
| d5-NEtFOSAA | 145 | | 37 - 164 |
| d3-NMeFOSAA | 138 | | 32 - 151 |
| 13C3 HFPO-DA | 149 | | 20 - 153 |
| d7-N-MeFOSE-M | 114 | | 10 - 143 |
| d9-N-EtFOSE-M | 119 | | 10 - 142 |
| M2-6:2 FTS | 120 | | 29 - 189 |
| M2-8:2 FTS | 142 | | 34 - 182 |
| 13C3 PFBS | 143 | | 19 - 178 |
| M2-4:2 FTS | 128 | | 20 - 187 |
| 13C5 PFHxA | 139 | | 31 - 142 |
| 13C9 PFNA | 134 | | 47 - 136 |
| 13C6 PFDA | 144 | *5+ | 47 - 128 |

Eurofins Lancaster Laboratories Env, LLC

QC Sample Results

Client: Eastern Research Group, Inc.

Job ID: 410-66395-1

Project/Site: Groundwater PFAS-TO2

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCSD 410-205834/3-A

Client Sample ID: Lab Control Sample Dup

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 206673

Prep Batch: 205834

| Isotope Dilution | LCSD | LCSD | Limits |
|-------------------------------------|-----------|-----------|----------|
| | %Recovery | Qualifier | |
| 13C7 PFUnA | 153 | *5+ | 40 - 135 |
| 13C3 PFHxS | 139 | | 32 - 145 |
| 13C2-PFD ₂ DA | 144 | *5+ | 28 - 136 |
| d5-NEtPFOSA | 102 | | 10 - 108 |
| d3-NMePFOSA | 103 | | 10 - 107 |
| 13C2-2-Perfluorohexylethanoic acid | 158 | *5+ | 50 - 150 |
| 13C2-2-Perfluorooctylethanoic acid | 157 | *5+ | 50 - 150 |
| 13C2-2-Perfluorodecylethanoic acid | 140 | | 50 - 150 |
| 13C2-2H-Perfluoro-2-octenoic acid | 144 | | 50 - 150 |
| 13C2-2H-Perfluoro-2-decanoic acid | 144 | | 50 - 150 |
| 13C2-2H-Perfluoro-2-dodecanoic acid | 135 | | 50 - 150 |
| 13C4 PFBA | 134 | *5+ | 41 - 132 |
| 13C5 PFP ₂ A | 148 | | 33 - 155 |
| 13C4 PFHpA | 136 | | 30 - 144 |
| 13C8 PFOA | 135 | *5+ | 49 - 127 |
| 13C8 PFOS | 130 | *5+ | 49 - 126 |
| 13C8 FOSA | 120 | | 10 - 143 |
| 13C2 PFTeDA | 133 | | 10 - 144 |

QC Association Summary

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

LCMS

Prep Batch: 204503

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 410-66395-1 | SP-21 | Total/NA | Water | 3535 | |
| 410-66395-1 - DL | SP-21 | Total/NA | Water | 3535 | |
| 410-66395-2 | SP-24 | Total/NA | Water | 3535 | |
| 410-66395-2 - DL | SP-24 | Total/NA | Water | 3535 | |
| 410-66395-2 - DL2 | SP-24 | Total/NA | Water | 3535 | |
| 410-66395-3 | Trip Blank | Total/NA | Water | 3535 | |
| 410-66395-4 | SP-27 | Total/NA | Water | 3535 | |
| 410-66395-6 - RE | SP-29 | Total/NA | Water | 3535 | |
| MB 410-204503/1-A | Method Blank | Total/NA | Water | 3535 | |
| LCS 410-204503/2-A | Lab Control Sample | Total/NA | Water | 3535 | |
| LCSD 410-204503/3-A | Lab Control Sample Dup | Total/NA | Water | 3535 | |

Analysis Batch: 205207

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|---------|------------|
| 410-66395-1 | SP-21 | Total/NA | Water | 537 IDA | 204503 |
| 410-66395-1 - DL | SP-21 | Total/NA | Water | 537 IDA | 204503 |
| 410-66395-2 | SP-24 | Total/NA | Water | 537 IDA | 204503 |
| 410-66395-2 - DL | SP-24 | Total/NA | Water | 537 IDA | 204503 |
| 410-66395-2 - DL2 | SP-24 | Total/NA | Water | 537 IDA | 204503 |
| 410-66395-3 | Trip Blank | Total/NA | Water | 537 IDA | 204503 |
| 410-66395-4 | SP-27 | Total/NA | Water | 537 IDA | 204503 |
| 410-66395-6 - RE | SP-29 | Total/NA | Water | 537 IDA | 204503 |
| MB 410-204503/1-A | Method Blank | Total/NA | Water | 537 IDA | 204503 |
| LCS 410-204503/2-A | Lab Control Sample | Total/NA | Water | 537 IDA | 204503 |
| LCSD 410-204503/3-A | Lab Control Sample Dup | Total/NA | Water | 537 IDA | 204503 |

Prep Batch: 205834

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 410-66395-1 - RE | SP-21 | Total/NA | Water | 3535 | |
| 410-66395-2 - RE | SP-24 | Total/NA | Water | 3535 | |
| 410-66395-3 - RE | Trip Blank | Total/NA | Water | 3535 | |
| 410-66395-5 | SP-28 | Total/NA | Water | 3535 | |
| 410-66395-6 - DL | SP-29 | Total/NA | Water | 3535 | |
| 410-66395-6 | SP-29 | Total/NA | Water | 3535 | |
| MB 410-205834/1-A | Method Blank | Total/NA | Water | 3535 | |
| LCS 410-205834/2-A | Lab Control Sample | Total/NA | Water | 3535 | |
| LCSD 410-205834/3-A | Lab Control Sample Dup | Total/NA | Water | 3535 | |

Analysis Batch: 206673

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|---------|------------|
| 410-66395-1 - RE | SP-21 | Total/NA | Water | 537 IDA | 205834 |
| 410-66395-2 - RE | SP-24 | Total/NA | Water | 537 IDA | 205834 |
| 410-66395-3 - RE | Trip Blank | Total/NA | Water | 537 IDA | 205834 |
| 410-66395-5 | SP-28 | Total/NA | Water | 537 IDA | 205834 |
| 410-66395-6 | SP-29 | Total/NA | Water | 537 IDA | 205834 |
| 410-66395-6 - DL | SP-29 | Total/NA | Water | 537 IDA | 205834 |
| MB 410-205834/1-A | Method Blank | Total/NA | Water | 537 IDA | 205834 |
| LCS 410-205834/2-A | Lab Control Sample | Total/NA | Water | 537 IDA | 205834 |
| LCSD 410-205834/3-A | Lab Control Sample Dup | Total/NA | Water | 537 IDA | 205834 |

Lab Chronicle

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Client Sample ID: SP-21

Date Collected: 12/06/21 14:50

Date Received: 12/10/21 10:01

Lab Sample ID: 410-66395-1

Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|------|
| Total/NA | Prep | 3535 | | | 204503 | 12/13/21 08:36 | X4HV | ELLE |
| Total/NA | Analysis | 537 IDA | | 1 | 205207 | 12/15/21 02:33 | PY4D | ELLE |
| Total/NA | Prep | 3535 | DL | | 204503 | 12/13/21 08:36 | X4HV | ELLE |
| Total/NA | Analysis | 537 IDA | DL | 10 | 205207 | 12/15/21 02:44 | PY4D | ELLE |
| Total/NA | Prep | 3535 | RE | | 205834 | 12/15/21 17:02 | RC3V | ELLE |
| Total/NA | Analysis | 537 IDA | RE | 1 | 206673 | 12/18/21 01:51 | I5JH | ELLE |

Client Sample ID: SP-24

Date Collected: 12/08/21 10:38

Date Received: 12/10/21 10:01

Lab Sample ID: 410-66395-2

Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|------|
| Total/NA | Prep | 3535 | | | 204503 | 12/13/21 08:36 | X4HV | ELLE |
| Total/NA | Analysis | 537 IDA | | 1 | 205207 | 12/15/21 02:55 | PY4D | ELLE |
| Total/NA | Prep | 3535 | DL | | 204503 | 12/13/21 08:36 | X4HV | ELLE |
| Total/NA | Analysis | 537 IDA | DL | 10 | 205207 | 12/15/21 03:17 | PY4D | ELLE |
| Total/NA | Prep | 3535 | DL2 | | 204503 | 12/13/21 08:36 | X4HV | ELLE |
| Total/NA | Analysis | 537 IDA | DL2 | 100 | 205207 | 12/15/21 03:28 | PY4D | ELLE |
| Total/NA | Prep | 3535 | RE | | 205834 | 12/15/21 17:02 | RC3V | ELLE |
| Total/NA | Analysis | 537 IDA | RE | 1 | 206673 | 12/18/21 02:13 | I5JH | ELLE |

Client Sample ID: Trip Blank

Date Collected: 11/23/21 00:00

Date Received: 12/10/21 10:01

Lab Sample ID: 410-66395-3

Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|------|
| Total/NA | Prep | 3535 | | | 204503 | 12/13/21 08:36 | X4HV | ELLE |
| Total/NA | Analysis | 537 IDA | | 1 | 205207 | 12/15/21 03:39 | PY4D | ELLE |
| Total/NA | Prep | 3535 | RE | | 205834 | 12/15/21 17:02 | RC3V | ELLE |
| Total/NA | Analysis | 537 IDA | RE | 1 | 206673 | 12/18/21 02:46 | I5JH | ELLE |

Client Sample ID: SP-27

Date Collected: 12/09/21 10:01

Date Received: 12/10/21 10:01

Lab Sample ID: 410-66395-4

Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|------|
| Total/NA | Prep | 3535 | | | 204503 | 12/13/21 08:36 | X4HV | ELLE |
| Total/NA | Analysis | 537 IDA | | 1 | 205207 | 12/15/21 04:01 | PY4D | ELLE |

Client Sample ID: SP-28

Date Collected: 12/09/21 10:14

Date Received: 12/10/21 10:01

Lab Sample ID: 410-66395-5

Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|------|
| Total/NA | Prep | 3535 | | | 205834 | 12/15/21 17:02 | RC3V | ELLE |
| Total/NA | Analysis | 537 IDA | | 1 | 206673 | 12/18/21 02:57 | I5JH | ELLE |

Eurofins Lancaster Laboratories Env, LLC

Lab Chronicle

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Client Sample ID: SP-29

Lab Sample ID: 410-66395-6

Matrix: Water

Date Collected: 12/09/21 10:43

Date Received: 12/10/21 10:01

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|------|
| Total/NA | Prep | 3535 | RE | | 204503 | 12/13/21 08:36 | X4HV | ELLE |
| Total/NA | Analysis | 537 IDA | RE | 1 | 205207 | 12/15/21 04:23 | PY4D | ELLE |
| Total/NA | Prep | 3535 | | | 205834 | 12/15/21 17:02 | RC3V | ELLE |
| Total/NA | Analysis | 537 IDA | | 1 | 206673 | 12/18/21 03:08 | I5JH | ELLE |
| Total/NA | Prep | 3535 | DL | | 205834 | 12/15/21 17:02 | RC3V | ELLE |
| Total/NA | Analysis | 537 IDA | DL | 10 | 206673 | 12/18/21 03:19 | I5JH | ELLE |

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|---|-------------|-----------------------|---|
| Illinois | NELAP | 200027 | 01-31-23 |
| The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification. | | | |
| Analysis Method | Prep Method | Matrix | Analyte |
| 537 IDA | 3535 | Water | 10:2 Fluorotemer unsaturated acid |
| 537 IDA | 3535 | Water | 10:2 Fluorotelomer carboxylic acid |
| 537 IDA | 3535 | Water | 11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS) |
| 537 IDA | 3535 | Water | 1H,1H,2H,2H-Perfluorododecane sulfonic acid (10:2 FTS) |
| 537 IDA | 3535 | Water | 3-Perfluoroheptylpropanoic acid (7:3 FTCA) |
| 537 IDA | 3535 | Water | 3-Perfluoropentylpropanoic acid (5:3 FTCA) |
| 537 IDA | 3535 | Water | 3-Perfluoropropylpropanoic acid (3:3 FTCA) |
| 537 IDA | 3535 | Water | 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) |
| 537 IDA | 3535 | Water | 4:2 Fluorotelomer sulfonic acid |
| 537 IDA | 3535 | Water | 6:2 Fluorotemer unsaturated acid |
| 537 IDA | 3535 | Water | 6:2 Fluorotelomer carboxylic acid |
| 537 IDA | 3535 | Water | 6:2 Fluorotelomer sulfonic acid |
| 537 IDA | 3535 | Water | 8:2 Fluorotemer unsaturated acid |
| 537 IDA | 3535 | Water | 8:2 Fluorotelomer carboxylic acid |
| 537 IDA | 3535 | Water | 8:2 Fluorotelomer sulfonic acid |
| 537 IDA | 3535 | Water | 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS) |
| 537 IDA | 3535 | Water | EVE Acid |
| 537 IDA | 3535 | Water | Hexafluoropropylene Oxide Dimer Acid (HFPO-DA) |
| 537 IDA | 3535 | Water | Hydro-EVE Acid |
| 537 IDA | 3535 | Water | Hydrolyzed PSDA |
| 537 IDA | 3535 | Water | Hydro-PS Acid |
| 537 IDA | 3535 | Water | MTP |
| 537 IDA | 3535 | Water | Nafion Byproduct 1 (Nafion BP1) |
| 537 IDA | 3535 | Water | N-ethylperfluoroctane sulfonamide (NEtFOSA) |
| 537 IDA | 3535 | Water | N-ethylperfluoroctane sulfonamidoethanol (NEtFOSE) |
| 537 IDA | 3535 | Water | N-ethylperfluoroctanesulfonamidoacetic acid (NETFOSAA) |
| 537 IDA | 3535 | Water | N-methylperfluoroctane sulfonamide (NMMeFOSA) |
| 537 IDA | 3535 | Water | N-methylperfluoroctane sulfonamidoethanol (NMMeFOSE) |
| 537 IDA | 3535 | Water | N-methylperfluoroctanesulfonamidoacetic acid (NMMeFOSAA) |
| 537 IDA | 3535 | Water | Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) |
| 537 IDA | 3535 | Water | NVHOS |
| 537 IDA | 3535 | Water | Perfluoro (2-ethoxyethane) sulfonic acid |
| 537 IDA | 3535 | Water | Perfluoro(3,5,7,9-tetraoxadecanoic) acid (PFO4DA) |

Accreditation/Certification Summary

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|---|-------------|-----------------------|--|
| The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification. | | | |
| Analysis Method | Prep Method | Matrix | Analyte |
| 537 IDA | 3535 | Water | Perfluoro(3,5,7-trioxaoctanoic) acid (PFO3OA) |
| 537 IDA | 3535 | Water | Perfluoro(3,5-dioxahexanoic) acid (PFO2HxA) |
| 537 IDA | 3535 | Water | Perfluoro-2-(perfluoroethoxy)propionic acid |
| 537 IDA | 3535 | Water | Perfluoro-2-methoxyacetic acid (PFMOAA) |
| 537 IDA | 3535 | Water | Perfluoro-3,5,7,9,11-pentaoxadodecanoic acid |
| 537 IDA | 3535 | Water | Perfluoro-3-methoxypropanoic acid (PFMPA) |
| 537 IDA | 3535 | Water | Perfluoro-3-methoxypropanoic acid (PMPA) |
| 537 IDA | 3535 | Water | Perfluoro-4-ethylcyclohexanesulfonic acid |
| 537 IDA | 3535 | Water | Perfluoro-4-isopropoxybutanoic acid (PFIpOBA) |
| 537 IDA | 3535 | Water | Perfluoro-4-methoxybutanoic acid (PFMBA) |
| 537 IDA | 3535 | Water | Perfluorobutanesulfonic acid |
| 537 IDA | 3535 | Water | Perfluorobutanoic acid |
| 537 IDA | 3535 | Water | Perfluorodecanesulfonic acid |
| 537 IDA | 3535 | Water | Perfluorodecanoic acid |
| 537 IDA | 3535 | Water | Perfluorododecanesulfonic acid |
| 537 IDA | 3535 | Water | Perfluorododecanoic acid |
| 537 IDA | 3535 | Water | Perfluoroheptanesulfonic acid |
| 537 IDA | 3535 | Water | Perfluoroheptanoic acid |
| 537 IDA | 3535 | Water | Perfluorohexadecanoic acid |
| 537 IDA | 3535 | Water | Perfluorohexanesulfonic acid |
| 537 IDA | 3535 | Water | Perfluorohexanoic acid |
| 537 IDA | 3535 | Water | Perfluorononanesulfonic acid |
| 537 IDA | 3535 | Water | Perfluorononanoic acid |
| 537 IDA | 3535 | Water | Perfluoroctadecanoic acid |
| 537 IDA | 3535 | Water | Perfluoroctanesulfonamide |
| 537 IDA | 3535 | Water | Perfluoroctanesulfonic acid |
| 537 IDA | 3535 | Water | Perfluoroctanoic acid |
| 537 IDA | 3535 | Water | Perfluoropentanesulfonic acid |
| 537 IDA | 3535 | Water | Perfluoropentanoic acid |
| 537 IDA | 3535 | Water | Perfluoropropanesulfonic acid |
| 537 IDA | 3535 | Water | Perfluoropropionic Acid (PFPrA) |
| 537 IDA | 3535 | Water | Perfluorotetradecanoic acid |
| 537 IDA | 3535 | Water | Perfluorotridecanoic acid |
| 537 IDA | 3535 | Water | Perfluoroundecanoic acid |
| 537 IDA | 3535 | Water | R-EVE |
| 537 IDA | 3535 | Water | R-PSDA |
| 537 IDA | 3535 | Water | R-PSDCA |

Method Summary

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

| Method | Method Description | Protocol | Laboratory |
|---------|------------------------------|----------|------------|
| 537 IDA | EPA 537 Isotope Dilution | EPA | ELLE |
| 3535 | Solid-Phase Extraction (SPE) | SW846 | ELLE |

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

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Sample Summary

Client: Eastern Research Group, Inc.
Project/Site: Groundwater PFAS-TO2

Job ID: 410-66395-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---------------|------------------|--------|----------------|----------------|
| 410-66395-1 | SP-21 | Water | 12/06/21 14:50 | 12/10/21 10:01 |
| 410-66395-2 | SP-24 | Water | 12/08/21 10:38 | 12/10/21 10:01 |
| 410-66395-3 | Trip Blank | Water | 11/23/21 00:00 | 12/10/21 10:01 |
| 410-66395-4 | SP-27 | Water | 12/09/21 10:01 | 12/10/21 10:01 |
| 410-66395-5 | SP-28 | Water | 12/09/21 10:14 | 12/10/21 10:01 |
| 410-66395-6 | SP-29 | Water | 12/09/21 10:43 | 12/10/21 10:01 |

Chain of Custody Record

Eurofins



410-66395 Chain of Custody

| | | | | | |
|--|--|---|---|------------------------------|--|
| Client Information | | Sampler: <i>Michelle Spiezio</i> | Lab PM: Williams, Marissa C | | |
| Client Contact: Michelle Spiezio | | Phone: <i>717-656-8302</i> | E-Mail: Marissa.Williams@eurofinset.com | | |
| Company: Eastern Research Group, Inc. | | PWSID | | | |
| Address: 14555 Avion Parkway Suite 200 | | Due Date Requested: | | | |
| City: Chantilly | | TAT Requested (days): <i>15 bus. days</i> | | | |
| State, Zip: VA, 20151-1102 | | Compliance Project: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | | | |
| Phone: 703-633-1717(Tel) | | PO # <i>0453.12.001.13</i> | | | |
| Email: Michelle.Spiezio@erg.com | | Purchase Order Requested | | | |
| Project Name: Groundwater PFAS - TO2 | | WO # | | | |
| Site: | | Project # 41008694 | | | |
| SSOW# | | Field Filtered Sample? <input checked="" type="checkbox"/> | | | |
| Sample Identification | | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=tissue, A=Air) |
| | | | | | PFC.IDA - PFAS, 70 compounds |
| | | | | | Total Number of Samples: 15 |
| | | | | | Special Instructions/Note: |
| | | | | | <i>2 bottles</i> |
| | | | | | <i>2 bottles</i> |
| | | | | | <i>provided by Lab</i> |
| | | | | | <i>2 bottles</i> |
| | | | | | <i>2 bottles</i> |
| | | | | | <i>2 bottles</i> |
| Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological | | | | | |
| Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input checked="" type="checkbox"/> Archive For <i>1</i> Months | | | | | |
| Deliverable Requested: I, II, III, IV, Other (specify) | | | | | |
| Special Instructions/QC Requirements: | | | | | |
| Empty Kit Relinquished by: | | Date: | Time: | Method of Shipment: | |
| <i>Michelle Spiezio</i> | | <i>12/10/21 115</i> | <i>ERG</i> | | |
| Relinquished by: | | Date/Time: | Company | Received by: | Date/Time: |
| | | | | | |
| Relinquished by: | | Date/Time: | Company | Received by: | Date/Time: |
| | | | | | |
| Custody Seals Intact: | | Custody Seal No.: <i>3-2</i> | | | |
| <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | | Cooler Temperature(s)°C and Other Remarks: | | | |

Login Sample Receipt Checklist

Client: Eastern Research Group, Inc.

Job Number: 410-66395-1

Login Number: 66395

List Source: Eurofins Lancaster Laboratories Env, LLC

List Number: 1

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| Question | Answer | Comment | |
|--|--------|---------|----|
| The cooler's custody seal is intact. | True | | 1 |
| The cooler or samples do not appear to have been compromised or tampered with. | True | | 2 |
| Samples were received on ice. | True | | 3 |
| Cooler Temperature is acceptable (</=6C, not frozen). | True | | 4 |
| Cooler Temperature is recorded. | True | | 5 |
| WV: Container Temperature is acceptable (</=6C, not frozen). | N/A | | 6 |
| WV: Container Temperature is recorded. | N/A | | 7 |
| COC is present. | True | | 8 |
| COC is filled out in ink and legible. | True | | 9 |
| COC is filled out with all pertinent information. | True | | 10 |
| There are no discrepancies between the containers received and the COC. | True | | 11 |
| Sample containers have legible labels. | True | | 12 |
| Containers are not broken or leaking. | True | | 13 |
| Sample collection date/times are provided. | True | | 14 |
| Appropriate sample containers are used. | True | | 15 |
| Sample bottles are completely filled. | True | | |
| There is sufficient vol. for all requested analyses. | True | | |
| Is the Field Sampler's name present on COC? | True | | |
| Sample custody seals are intact. | True | | |